

Nursing Facilities, Staffing, Residents, and Facility Deficiencies, 1993 Through 1999

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STATE DATA ON NURSING FACILITIES, STAFFING, RESIDENTS, AND FACILITY DEFICIENCIES, 1993 THROUGH 1999

Introduction

The large state and federal expenditures for nursing homes (\$87.8 billion in 1998) have drawn the attention of policy makers and researchers to understand the nursing home industry (Levit et al., 2000). The demand for nursing home beds is growing with the aging of the population and many other factors (Zedlewski and McBride, 1992). As the need for care grows, the nation's nursing facilities are an increasing subject of concern. The specific characteristics of the facilities, staff, and residents are of critical importance to the delivery of nursing home care.

The quality of care provided in nursing homes has long been a matter of great concern to consumers, professionals, and policy-makers. Because of the growing concern about nursing home quality, Congress requested a study by the Institute of Medicine (IOM). The IOM's Study on Nursing Home Regulation (1986) and other studies reported widespread quality of care problems and recommended the strengthening of federal regulations for nursing homes (USGAO, 1987; US Senate, 1986; Zimmerman et al., 1985). The IOM Committee recommendations and the active efforts of many consumer advocates resulted in Congress passing Nursing Home Reform Legislation (OBRA, 1987).

The OBRA 1987, implemented by HCFA regulations in 1990 and in 1992, mandated a number of changes. First, the regulations eliminated the priority hierarchy of conditions, standards, and elements that were in the prior regulations. Second, comprehensive assessments of all nursing home residents were mandated to determine the functional, cognitive, and affective levels of residents which must be used in the care planning process (Morris et al., 1990). Third, more specific requirements for nursing, medical and psychosocial services were designed to attain and maintain the highest possible mental and physical functional status by focusing on outcomes (such as incontinence, immobility, and decubitus ulcers). Regulations detailing and protecting residents' rights were added. Major changes were made by the Health Care Financing Administration in the federal survey reports and the enforcement procedures in July 1995.

One valuable source of data on nursing facilities and the quality of care in these facilities is from the On-line Survey, Certification, and Reporting system (OSCAR). The OSCAR system has information from the state surveys of all (about 15,100) certified nursing facilities in the U.S., which are entered into a uniform, computerized database.

Purpose of the Data Book

This book presents calendar year data on nursing facilities, staffing, resident characteristics, and surveyor reports of quality deficiencies by state. These OSCAR data are from surveys in 1993 through 1999 collected by state agency surveyors on nursing facilities during the federal certification process.

The OSCAR data were collected from surveys conducted during each calendar year. Unfortunately, because of the way the historical data files were overwritten when a new survey was conducted by the Health Care Financing Administration (HCFA), some facility data were not available from the historical files for 1993. The OSCAR data reported here includes the large majority of facilities and no systematic biases were identified for those facilities not included in those years. Data for the remaining periods were complete.

The report presents a description of facility characteristics. Detailed summaries about the type of certification, bed size, occupancy, ownership, hospital-based and chain affiliations and other facility characteristics are presented.

Resident characteristics are shown as reported by the nursing facilities. These include activities of daily living (ADLs), restraints, incontinence, psychological problems, and other special care needs of residents.

Nurse staffing (RNs, LVNs, and NAs) hours per resident day are presented for

nursing facilities. These data are reported by facilities for a two-week period prior to when the state survey was conducted. The data are the only major source of information for all facilities on staffing levels.

Finally, data are presented on facility deficiencies based on state surveyor evaluations of the process and outcomes of care in the facilities. Deficiency data are presented for the 17 major areas used in the survey process: (1) resident rights; (2) admission, transfer and discharge rights; (3) resident behavior and facility practices; (4) quality of life; (5) resident assessment; (6) quality of care; (7) nursing services; (8) dietary services; (9) physician services; (10) rehabilitation services; (11) dental services; (12) pharmacy services; (13) infection control; (14) physical environment; (15) administration; (16) laboratory services; and (17) other. The information compiled shows differences in the frequency of the deficiencies by type and category.

In order to use the OSCAR data for this report, the researchers have undertaken a process to prepare the data. Certain decision rules were developed to use different components of the data. Technical issues are described in detail in the Appendix.

Background on the Survey System and Data Collection

Every facility must have an initial survey to verify compliance with all federal regulatory requirements in order to be certified. Certified facilities are resurveyed annually in order to continue certification. States are required to survey each facility no less often than every 15 months, and the state average for all facilities is about every 12 months. Follow-up surveys may be conducted to assure that facilities correct identified deficiencies. In addition, surveys are required when there are substantial changes in a facility's organization and management. Finally, surveys may be conducted to follow-up a complaint that alleges substandard care.

OSCAR data are collected in two different ways. First, the facility characteristics, resident characteristics, and staffing levels are completed on standardized forms by individual nursing homes at the beginning of each survey and are certified by the facility as being accurate. The data are provided to the state surveyors on the appropriate forms as the state begins the survey process. During the survey, state surveyors review the data and conduct checks by comparing the facility report with individual resident medical records, staffing records, and observations of residents. After the review of the survey data, state staff enter these data from written forms into a computerized on-line OSCAR data base.

Second, state surveyors make decisions regarding whether the facility has met or not met each standard after the facility survey has been completed. If a facility is judged to not meet a standard, the facility is given a deficiency and OSCAR reports that the standard was NOT MET.

The survey evaluations are based upon data from a combination of sources including, but not limited to, the assessment of a selected sample of individual residents; interviews with a sample of residents, family members and staff; a review of the resident records and facility documents; and other data. After these judgments are made, the state surveyors record and enter the data for each item for each facility into the on-line OSCAR data system. Thus, the determinations of deficiencies are made by state surveyors independently of the facility, with standard forms, sampling and survey procedures to ensure accuracy. State surveyor decisions are reviewed by team members and state supervisors. Facilities have the option to challenge and appeal decisions through an administrative review process.

Because of these checks in the system, the likelihood of false positive deficiencies is low, and errors tend to be in under-reporting of failures to meet standards (USGAO, 1998). Thus, a note of caution is needed that under-reporting of deficiencies is more likely to be a problem than over-reporting.

HCFA Procedures and State Survey Variation

HCFA uses "front-end" edit screens to ensure the accuracy of the OSCAR data. State staff enter the data for each survey item into the OSCAR data set within 45 days of each survey. Some "front-end edit" checks are established in the OSCAR program for entering the data for each component of the survey to identify entry errors. This computerized edit system has resolved many data problems. Beyond this, the regional offices conduct reviews of OSCAR data from each state survey.

One concern about the OSCAR data has been with the survey procedures and the intersurvey reliability (both across states and within states) in judging the quality of facilities (IOM, 1986; U.S. GAO, 1988). This issue has been addressed in part by the implementation of the 1990 federal survey procedures. First, the procedures require accuracy checks by surveyors to determine whether facilities are conducting comprehensive assessments of residents and whether or not these assessments are accurate and appropriately used in the care planning process. The federal regulations and survey forms have improved the sampling procedures and survey methods used by the survey teams. The federal procedures require state surveyors to use a stratified random sample of residents for in-depth reviews and to conduct face-to-face resident assessments, closed record reviews, and individual and group structured interviews. These changes were designed to improve the reliability of the survey process and the data reported on

OSCAR and to make surveys more oriented toward the residents. Moreover, HCFA has provided extensive new federal training for state surveyors.

In addition, the Health Care Standards and Quality Bureau of HCFA, using federal survey teams from the regional offices, conducts periodic oversight surveys. In the past, Federal staff resurveyed the same facilities within 60 days of the state survey for a sample of facilities. Regional HCFA offices developed a survey concurrence index for key survey components (from OSCAR) for each state. This annual concurrence index becomes a part of the federal monitoring criteria along with other components conducted by HCFA. States that fall below the concurrence standards established by HCFA are critiqued and monitored by HCFA. Using the procedures since July 1995, federal surveyors now accompany state surveyors on a selected number of surveys to observe the surveys.

Even though HCFA has made efforts to standardize the reporting of deficiencies by state survey staff, some regional variations may exist. Different states may vary their survey procedures, training efforts, and enforcement stringency (USGAO, 1999; USOIG, 1993). The US Office of the Inspector General (USOIG, 1993) reported that staff turnover and recruitment problems and fiscal problems at the state level may hamper survey and enforcement efforts. Preliminary results from a recent national evaluation of the nursing home certification survey process

conducted by Abt et al. (1993) also found some variations in the survey process. Since it is difficult to distinguish between real differences in the quality of facilities and differences in survey procedures, regional variations should be taken into account by the user of the report.

It is hoped that this report will be useful to consumers, nursing facilities, researchers, and policy makers to understand trends over time and across states.

FACILITY CHARACTERISTICS

Background

Facility characteristics are important. The most important feature of a facility is the number of beds which are certified for Medicare and Medicaid residents. The size of the facility determines the number of residents which can be admitted. Occupancy rates are important in showing the potential availability of beds and such occupancy rates influence the financial status of the facility. High occupancy rates can limit access to care, especially for those on Medicaid (USGAO, 1990).

The percentage of Medicare and Medicaid patients in a facility is an important factor. Nursing homes have historically considered Medicaid reimbursement rates to be low and prefer private pay patients (Phillips and Hawes, 1988). Nyman (1988b) found that nursing homes in Iowa with more private pay residents provided better quality of care. Gertler (1989) also found a relationship between greater Medicaid patients and poorer quality of nursing home care. Spector and Takada (1991) were able to confirm that facilities with a low percentage of private residents were associated with poorer outcomes of care. Thus, the percentage of Medicare or private pay patients should be included in descriptive information about facilities (Nyman, 1988a,b; 1989b; Davis, 1993).

One of the major debates in research circles is whether the proprietary nature

of the nursing home industry affects process and outcomes in terms of quality of care. A review of the research studies on ownership and quality shows a mixed picture in terms of the relationship (Koetting, 1980; O'Brien et al., 1983; Greene and Monahan, 1981; Hawes and Phillips, 1986; Ullman, 1987; Nyman et al., 1990; Davis, 1991; Aaronson et al., 1994). Nyman (1988b) found that nonprofit nursing homes in Iowa were associated with higher quality of care. Davis (1993) found that for-profit and chain facilities in Kentucky had lower operating costs, lower quality (as measured by a composite index of the likelihood rates for decubitus ulcers, catheterization, physical restraints, chemical restraints, and drug error rates) even though they also had higher ratios of registered nurses per resident and lower overall staffing levels. Thus, proprietary ownership is an area of great debate, but proprietary facilities and chains may be associated with lower staffing levels and poorer process and outcome measures.

Hospital-based nursing homes may have higher quality of care because they have more Medicare patients, have higher staffing levels, and/or are more likely to be non-profit in ownership. Having accreditation may be positively associated with higher staffing levels and with higher quality of care. The existence of dedicated special care units, such as those for persons with Alzheimer's disease, may also be

associated with higher quality of care because of higher staffing levels. Large size facilities may also be associated with higher quality although findings are mixed (Ullmann, 1981; Nyman 1998b; Davis, 1991). Those facilities with organized residents groups or organized family groups may have higher quality of care. Facilities with the capacity to conduct research may also be expected to have higher quality of care.

The following section presents data from OSCAR to describe certified nursing facilities in the U.S.: beds by certification types (Medicare, Medicaid, or both), occupancy rate (number of residents divided by total number of beds), ownership (non-profit religious, non-profit private, non-profit other,

proprietary, or government), owned or leased by a multi-facility organization (chain), and hospital-based facility (yes or no).

In addition, the number of beds in special care units (such as Alzheimer's, AIDS, etc.) was reported. Facilities that have an organized residents' group (yes or no) or organized family member group (yes or no) were also reported. Summary data on each of these structural features are presented for each state.

FINDINGS

FACILITY CHARACTERISTICS

Total Number of Certified Nursing Facilities By Calendar Year

Table 1 shows the total number of certified nursing facilities surveyed in the U.S. by calendar year available for this report. Data for 1993 were underreported because of incomplete historical files from HCFA. Surveys during the calendar years of 1994 through 1999 were more complete. There were 15,288 certified nursing facilities reported in 1994 and 15,086 in 1999. Not all facilities are surveyed by state agencies during a calendar year.

TABLE 1
TOTAL NUMBER OF CERTIFIED NURSING FACILITIES IN THE U.S.
BY CALENDAR YEAR

State	1993	1994	1995	1996	1997	1998	1999
AK	12	14	13	16	14	14	14
AL	194	203	198	208	196	216	198
AR	239	242	260	256	255	236	217
AZ	118	135	112	142	118	129	87
CA	1,138	1,295	1,252	1,311	1,298	1,194	1,139
CO	200	197	203	190	208	212	219
CT	243	255	251	228	253	225	238
DC	15	18	13	18	22	14	14
DE	37	43	33	37	42	27	34
FL	572	616	569	586	620	660	695
GA	339	338	353	353	299	350	337
HI	25	26	42	40	42	44	39
IA	436	431	412	429	407	419	403
ID	65	78	80	74	77	79	78
IL	764	772	832	838	837	834	850
IN	362	501	523	538	548	540	532
KS	417	361	390	354	368	400	386
KY	259	259	234	280	260	304	282
LA	295	305	327	330	337	339	351
MA	481	491	484	483	529	477	461
MD	189	200	186	207	215	171	134
ME	125	131	115	125	125	118	114
MI	380	412	366	411	406	394	402
MN	427	354	380	358	388	401	393
MO	444	514	503	507	548	500	508
MS	164	162	199	190	201	200	182
MT	95	96	100	93	95	92	97
NC	348	369	386	366	379	385	371
ND	80	81	83	87	75	88	87
NE	219	221	226	229	233	230	230
NH	66	67	72	70	75	75	66
NJ	263	294	303	301	292	306	206
NM	69	77	77	79	63	66	77
NV	31	40	36	39	38	41	40
NY	524	609	547	558	532	540	542
OH	846	875	884	973	918	918	824
OK	331	341	383	379	383	297	291
OR	156	150	150	154	152	155	142
PA	628	710	640	722	775	764	750
RI	77	92	82	86	92	89	92
SC	135	134	154	165	175	163	147
SD	108	106	111	100	101	86	85
TN	289	298	300	324	341	349	347
TX	883	1,185	1,190	1,198	1,175	1,136	1,177
UT	88	90	76	79	91	89	74
VA	244	263	238	252	237	231	260
VT	41	18	40	37	37	34	42
WA	263	269	269	267	276	271	265
WI	394	388	400	389	399	390	397
WV	80	128	67	110	78	69	134
WY	28	34	38	37	36	40	36
US	14,226	15,288	15,182	15,603	15,661	15,401	15,086

Total Number of Certified Nursing Facility Beds By Calendar Year

Table 2 shows the number of certified nursing facility beds in the U.S. surveyed during a calendar year which were available for the report. The total reported was an undercount for 1993. There were 1,617,036 nursing facility beds reported in 1994, and 1,578,309 in 1999.

TABLE 2
TOTAL NUMBER OF CERTIFIED NURSING FACILITY BEDS IN THE U.S.
BY CALENDAR YEAR

State	1993	1994	1995	1996	1997	1998	1999
AK	618	671	582	733	633	675	712
AL	20,328	21,320	21,275	22,531	21,357	24,056	22,035
AR	22,966	23,868	25,274	24,733	24,863	23,337	21,086
AZ	11,857	15,019	12,104	15,090	12,955	14,091	9,406
CA	101,865	120,927	113,726	118,898	119,015	108,655	106,418
CO	17,670	18,217	18,487	17,331	18,436	18,759	19,366
CT	28,361	30,952	30,363	29,123	31,691	27,962	29,699
DC	2,945	3,102	1,976	2,461	3,116	2,175	1,992
DE	3,367	4,869	3,693	3,869	4,776	3,169	4,096
FL	62,068	72,041	64,358	65,236	68,368	72,598	77,967
GA	36,067	37,082	38,020	37,969	33,325	37,934	36,858
HI	1,574	2,144	3,530	3,413	3,696	3,860	3,537
IA	31,880	34,055	32,299	33,572	32,420	31,986	31,922
ID	4,981	5,790	5,814	5,343	5,693	5,883	5,964
IL	87,901	95,673	102,729	105,211	103,943	103,731	107,230
IN	34,143	54,443	55,762	57,542	58,974	58,371	55,573
KS	28,514	25,708	27,675	25,225	25,622	27,698	26,649
KY	20,331	20,918	19,091	23,048	21,466	24,828	22,942
LA	31,959	34,554	37,240	37,136	37,848	38,828	40,565
MA	46,982	50,366	48,162	48,826	54,270	49,628	48,272
MD	23,664	26,416	23,732	26,072	26,287	20,065	16,686
ME	8,391	9,537	7,856	8,907	8,709	7,848	7,456
MI	41,906	47,492	41,569	47,581	46,451	44,932	46,449
MN	43,840	36,161	38,513	36,720	39,111	39,757	39,625
MO	39,242	50,342	48,193	48,718	53,386	47,931	49,746
MS	14,985	14,837	16,997	15,819	16,466	16,837	15,435
MT	6,651	7,062	7,232	6,510	6,844	6,743	7,097
NC	34,381	36,501	37,899	35,951	37,081	37,979	37,436
ND	6,910	6,725	6,634	7,115	6,031	7,055	6,827
NE	16,697	17,427	17,538	17,710	17,800	17,678	17,331
NH	5,992	6,538	7,006	6,958	7,399	7,247	6,187
NJ	38,519	43,479	43,995	44,734	43,061	43,080	28,764
NM	6,363	6,372	6,500	6,911	5,402	5,779	7,080
NV	3,091	3,981	3,617	3,586	3,083	3,721	4,764
NY	88,175	106,753	92,669	97,936	92,031	95,393	95,808
OH	75,897	88,762	87,628	99,553	93,726	94,173	85,109
OK	27,091	28,329	32,123	32,107	31,474	24,395	24,340
OR	12,886	13,075	12,988	13,270	13,144	13,367	12,468
PA	82,140	91,460	81,036	90,142	93,680	91,648	91,920
RI	7,414	9,547	8,485	8,936	9,398	9,293	9,492
SC	13,252	13,575	15,626	16,621	17,472	16,299	14,536
SD	7,899	7,684	8,093	7,178	7,054	6,257	5,577
TN	33,578	34,536	34,174	36,892	37,476	38,832	38,700
TX	79,499	115,895	113,362	116,290	113,412	111,589	117,212
UT	6,828	7,078	5,609	6,724	7,261	7,025	5,525
VA	26,562	29,113	26,671	28,393	26,243	25,153	27,962
VT	3,174	1,334	3,383	3,077	3,129	2,787	3,431
WA	26,011	26,515	26,053	25,877	25,996	25,216	24,624
WI	47,096	45,135	46,685	45,174	44,830	43,593	44,767
WV	6,590	10,852	5,600	8,846	7,760	5,441	10,842
WY	2,169	2,804	3,125	3,082	2,892	3,158	2,824
US	1,433,270	1,617,036	1,572,751	1,630,680	1,626,556	1,598,495	1,578,309

Average Number of Certified Beds Per Nursing Facility

The number of nursing beds per facility is calculated by dividing the total number of beds in a state by the total number of facilities in the state. Table 3 shows the overall average size of certified facilities in the U.S. was about 104-106 beds per facility in the 1993-1999 period. These data are similar to the average size of licensed nursing homes reported at 102 beds in 1994 (DuNah et. al., 1994). Larger licensed facilities may be slightly more likely to be certified than small facilities.

Average Size of Nursing Facilities

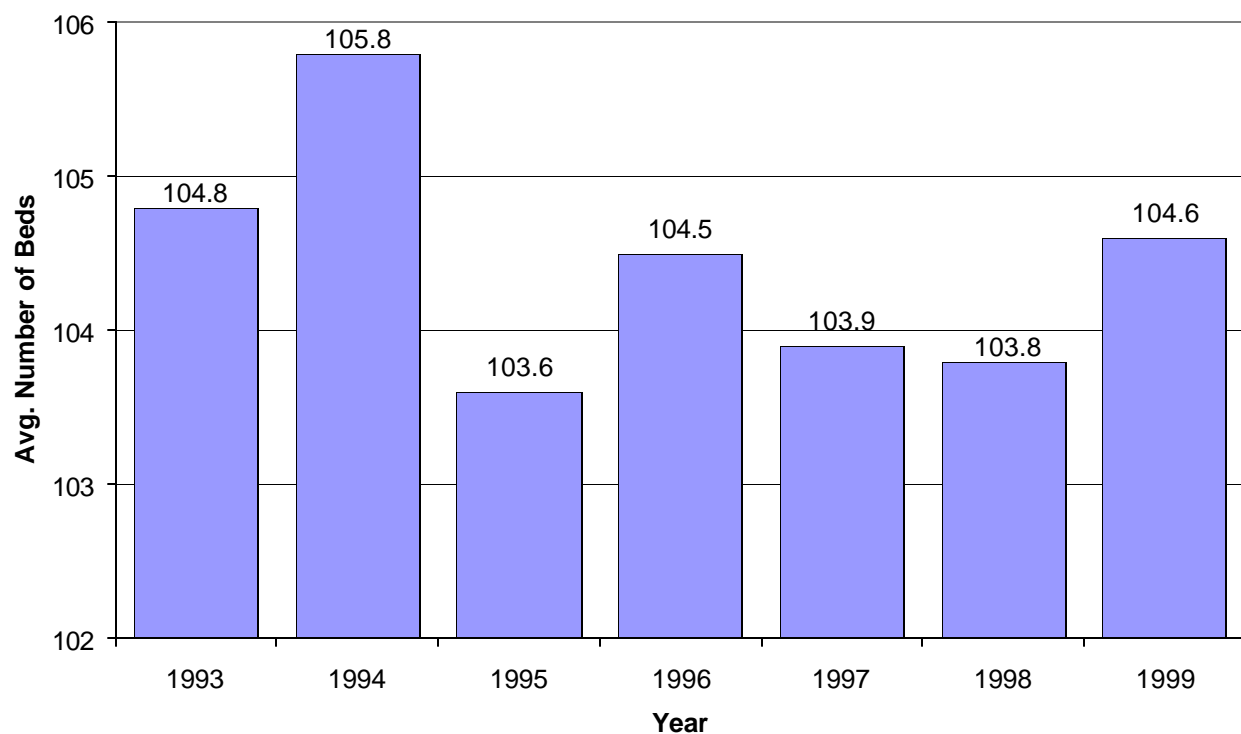


TABLE 3
AVERAGE NUMBER OF CERTIFIED NURSING FACILITY BEDS IN THE U.S.
BY CALENDAR YEAR

State	1993	1994	1995	1996	1997	1998	1999
AK	56.8	47.9	44.8	45.8	45.2	48.2	50.9
AL	106.0	105.0	107.4	108.3	109.0	111.4	111.3
AR	97.4	98.6	97.2	96.6	97.5	98.9	97.2
AZ	111.2	111.3	108.1	106.3	109.8	109.2	108.1
CA	93.1	93.4	90.8	90.7	91.7	91.0	93.4
CO	93.5	92.5	91.1	91.2	88.6	88.5	88.4
CT	118.8	121.4	121.0	127.7	125.3	124.3	124.8
DC	197.0	172.3	152.0	136.7	141.6	155.4	142.3
DE	101.1	113.2	111.9	104.6	113.7	117.4	120.5
FL	115.6	116.9	113.1	111.3	110.3	110.0	112.2
GA	108.6	109.7	107.7	107.6	111.5	108.4	109.4
HI	63.2	82.5	84.0	85.3	88.0	87.7	90.7
IA	78.6	79.0	78.4	78.3	79.7	76.3	79.2
ID	79.7	74.2	72.7	72.2	73.9	74.5	76.5
IL	123.4	123.9	123.5	125.6	124.2	124.4	126.2
IN	106.4	108.7	106.6	107.0	107.6	108.1	104.5
KS	71.3	71.2	71.0	71.3	69.6	69.2	69.0
KY	83.4	80.8	81.6	82.3	82.6	81.7	81.4
LA	112.7	113.3	113.9	112.5	112.3	114.5	115.6
MA	99.2	102.6	99.5	101.1	102.6	104.0	104.7
MD	130.5	132.1	127.6	126.0	122.3	117.3	124.5
ME	67.1	72.8	68.3	71.3	69.7	66.5	65.4
MI	115.5	115.3	113.6	115.8	114.4	114.0	115.5
MN	103.7	102.1	101.4	102.6	100.8	99.1	100.8
MO	96.8	97.9	95.8	96.1	97.4	95.9	97.9
MS	91.8	91.6	85.4	83.3	81.9	84.2	84.8
MT	70.0	73.6	72.3	70.0	72.0	73.3	73.2
NC	98.9	98.9	98.2	98.2	97.8	98.6	100.9
ND	86.4	83.0	79.9	81.8	80.4	80.2	78.5
NE	78.2	78.9	77.6	77.3	76.4	76.9	75.4
NH	92.3	97.6	97.3	99.4	98.7	96.6	93.7
NJ	147.8	147.9	145.2	148.6	147.5	140.8	139.6
NM	93.2	82.8	84.4	87.5	85.7	87.6	91.9
NV	99.7	99.5	100.5	91.9	81.1	90.8	119.1
NY	168.5	175.3	169.4	175.5	173.0	176.7	176.8
OH	98.4	101.4	99.1	102.3	102.1	102.6	103.3
OK	83.3	83.1	83.9	84.7	82.2	82.1	83.6
OR	85.9	87.2	86.6	86.2	86.5	86.2	87.8
PA	132.3	128.8	126.6	124.9	120.9	120.0	122.6
RI	98.7	103.8	103.5	103.9	102.2	104.4	103.2
SC	104.9	101.3	101.5	100.7	99.8	100.0	98.9
SD	73.3	72.5	72.9	71.8	69.8	72.8	65.6
TN	117.6	115.9	113.9	113.9	109.9	111.3	111.5
TX	96.5	97.8	95.3	97.1	96.5	98.2	99.6
UT	78.2	78.6	73.8	85.1	79.8	78.9	74.7
VA	111.6	110.7	112.1	112.7	110.7	108.9	107.5
VT	84.1	74.1	84.6	83.2	84.6	82.0	81.7
WA	100.9	98.6	96.9	96.9	94.2	93.0	92.9
WI	119.7	116.3	116.7	116.1	112.4	111.8	112.8
WV	83.0	84.8	83.6	80.4	99.5	78.9	80.9
WY	77.5	82.5	82.2	83.3	80.3	79.0	78.4
US	104.8	105.8	103.6	104.5	103.9	103.8	104.6

Number of Nursing Facility Residents

Table 4 reports the total number of nursing facility residents in each state during a calendar year available for the report. Again, there was under reporting for 1993. There were 1,302,315 residents reported in nursing facilities in 1999. The variation over the years is probably related to differences in the state surveys in each of the calendar years.

Average Occupancy Rates

Table 4 shows that the average certified nursing facility occupancy rate for the U.S. was about 88 percent in 1993. Facility occupancy rates are calculated by dividing the number of nursing residents in a facility by the total number of beds. The occupancy rates declined gradually from 87.8 to 82.5 percent over the 1993 to 1999 period. See the Technical Notes.

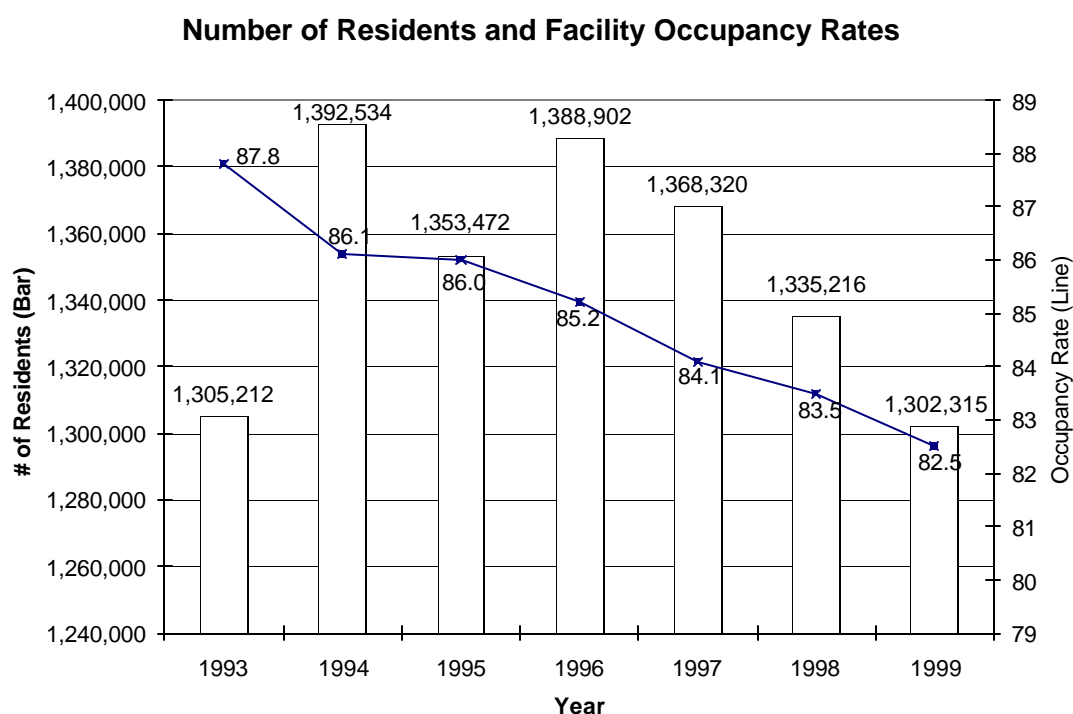


TABLE 4
TOTAL NUMBER OF RESIDENTS AND FACILITY OCCUPANCY RATES
FOR CERTIFIED NURSING FACILITIES

State	Number of Residents							Facility Occupancy						
	1993	1994	1995	1996	1997	1998	1999	1993	1994	1995	1996	1997	1998	1999
AK	496	601	526	626	535	601	597	71.7	89.6	90.4	85.4	84.5	89.0	83.8
AL	19,450	19,700	19,750	20,614	19,947	22,330	20,365	95.4	92.4	92.8	91.5	93.4	92.8	92.4
AR	19,802	19,990	20,888	20,104	19,919	18,061	16,058	84.5	83.8	82.6	81.3	80.1	77.4	76.2
AZ	10,522	11,554	9,281	12,339	9,758	10,983	7,046	80.9	76.9	76.7	81.8	75.3	77.9	74.9
CA	90,445	103,000	97,828	99,989	98,412	89,825	87,165	86.2	85.2	86.0	84.1	82.7	82.7	81.9
CO	16,143	15,681	15,964	15,235	15,349	15,647	16,159	84.4	86.1	86.4	87.9	83.3	83.4	83.4
CT	25,813	27,879	28,248	27,352	29,435	25,683	27,210	91.9	90.1	93.0	93.9	92.9	91.8	91.6
DC	2,668	2,357	1,918	2,137	2,964	2,089	1,801	92.9	76.0	97.1	86.8	95.1	96.0	90.4
DE	2,989	3,895	3,044	3,274	3,723	2,430	2,973	79.8	80.0	82.4	84.6	78.0	76.7	72.6
FL	59,048	61,334	55,486	55,109	57,677	59,754	64,700	89.6	85.1	86.1	84.5	84.4	82.3	83.0
GA	34,668	34,681	35,709	35,552	30,709	34,960	33,796	95.0	93.5	93.9	93.6	92.2	92.2	91.7
HI	1,470	2,059	3,215	3,204	3,395	3,551	3,224	92.2	96.0	91.1	93.9	91.9	92.0	91.2
IA	29,302	28,491	26,966	27,781	26,459	26,227	25,526	87.9	83.7	83.5	82.8	81.6	82.0	80.0
ID	4,233	4,897	4,870	4,462	4,340	4,533	4,459	82.7	84.6	83.8	83.5	76.2	77.1	74.8
IL	77,837	78,032	82,876	83,230	81,724	80,504	81,459	83.8	81.6	80.7	79.1	78.6	77.6	76.0
IN	28,471	40,144	41,217	42,178	42,461	41,169	38,949	77.1	73.7	73.9	73.3	72.0	70.5	70.1
KS	25,496	21,503	23,178	20,503	20,820	22,765	21,777	86.6	83.6	83.8	81.3	80.8	82.2	81.7
KY	19,383	18,216	16,828	20,531	19,074	22,181	20,658	89.3	87.1	88.1	89.1	88.9	89.3	90.0
LA	28,947	29,500	31,763	30,791	30,799	30,922	31,678	85.0	85.4	85.3	82.9	81.4	79.6	78.1
MA	44,411	45,529	43,254	44,076	48,493	44,232	42,803	93.5	90.4	89.8	90.3	89.4	89.1	88.7
MD	21,943	22,884	20,923	22,491	21,832	16,441	13,790	89.2	86.6	88.2	86.3	83.1	81.9	82.6
ME	8,034	8,909	7,135	7,812	7,645	6,897	6,676	95.2	93.4	90.8	87.7	87.8	87.9	89.5
MI	38,689	41,622	36,582	40,959	40,357	38,032	39,226	90.4	87.6	88.0	86.1	86.9	84.6	84.4
MN	41,489	33,714	36,166	33,651	36,159	36,196	35,526	94.1	93.2	93.7	91.6	92.5	91.0	89.7
MO	33,492	38,583	35,841	36,303	39,236	34,801	35,330	78.8	76.6	74.4	74.5	73.5	72.6	71.0
MS	14,617	14,059	16,089	15,012	15,397	15,717	14,573	96.2	94.8	94.7	94.9	93.5	93.3	94.4
MT	6,030	6,311	6,377	5,628	5,694	5,508	5,609	90.7	89.4	88.2	86.5	83.2	81.7	79.0
NC	31,605	32,557	35,423	33,911	34,770	34,882	33,625	91.5	89.2	93.5	94.3	93.8	91.8	89.8
ND	6,671	6,450	6,372	6,782	5,649	6,569	6,241	95.3	95.9	96.1	95.3	93.7	93.1	91.4
NE	15,240	15,725	15,517	15,583	15,297	15,057	14,491	89.7	90.2	88.5	88.0	85.9	85.2	83.6
NH	5,659	5,938	6,520	6,532	6,889	6,702	5,631	90.8	90.8	93.1	93.9	93.1	92.5	91.0
NJ	36,283	39,894	40,718	41,529	39,516	39,089	25,453	93.2	91.8	92.6	92.8	91.8	90.7	88.5
NM	5,652	5,425	5,585	5,808	4,522	4,989	6,258	88.9	85.1	85.9	84.0	83.7	86.3	88.4
NV	2,668	3,592	3,213	3,208	2,743	3,128	3,100	88.6	90.2	88.8	89.5	89.0	84.1	65.1
NY	84,499	101,421	88,160	93,688	87,959	91,264	90,930	96.7	95.0	95.1	95.7	95.6	95.7	94.9
OH	70,611	73,767	72,540	80,378	75,505	75,303	66,696	85.9	83.1	82.8	80.7	80.6	80.0	78.4
OK	21,939	22,129	24,999	24,403	22,930	17,656	17,335	79.7	78.1	77.8	76.0	72.9	72.4	71.2
OR	11,260	11,062	10,807	10,779	10,491	10,497	9,382	85.0	84.6	83.2	81.2	79.8	78.5	75.2
PA	75,706	83,131	73,849	81,770	84,504	82,239	81,108	90.2	90.9	91.1	90.7	90.2	89.7	88.2
RI	7,200	9,102	7,792	8,330	8,617	8,293	8,326	93.9	95.3	91.8	93.2	91.7	89.2	87.7
SC	12,389	11,723	13,625	14,648	15,172	14,017	12,673	86.8	86.4	87.2	88.1	86.8	86.0	87.2
SD	7,583	7,377	7,658	6,795	6,641	5,778	5,103	95.9	96.0	94.6	94.7	94.1	92.3	91.5
TN	31,820	31,315	30,889	33,533	33,864	34,887	34,668	92.7	90.7	90.4	90.9	90.4	89.8	89.6
TX	63,745	84,795	81,822	82,556	79,603	76,125	79,898	76.4	73.2	72.2	71.0	70.2	68.2	68.2
UT	5,544	5,809	4,588	5,507	5,746	5,436	4,300	81.0	82.1	81.8	81.9	79.1	77.4	77.8
VA	25,357	27,236	25,088	25,965	23,861	22,705	24,934	92.6	93.6	94.1	91.4	90.9	90.3	89.2
VT	3,274	1,276	3,280	2,899	2,939	2,486	3,091	92.8	95.7	97.0	94.2	93.9	89.2	90.1
WA	23,568	23,650	22,596	21,935	21,329	20,652	19,978	89.7	89.2	86.7	84.8	82.0	81.9	81.1
WI	43,060	41,406	42,466	40,606	39,627	37,873	37,778	91.7	91.7	91.0	89.9	88.4	86.9	84.4
WV	6,257	10,139	5,312	8,230	5,419	4,917	9,880	94.5	93.4	94.9	93.0	69.8	90.4	91.1
WY	1,734	2,490	2,731	2,584	2,414	2,633	2,303	82.9	88.8	87.4	83.8	83.5	83.4	81.6
US	1,305,212	1,392,534	1,353,472	1,388,902	1,368,320	1,335,216	1,302,315	87.8	86.1	86.0	85.2	84.1	83.5	82.5

Facility Beds by Certification Category

Licensed nursing facilities may apply to be certified for participation in the Medicare and/or Medicaid program on a voluntary basis. Facilities may apply to participate in: (1) the Medicaid only (Title 19) program, (2) the Medicare only (Title 18) program, or (3) in the Medicare/Medicaid dually certified (Title 18 and 19) program. Since 1991, the Medicare program classified facilities as skilled nursing facilities (SNFs) while the Medicaid-certified facilities are designed as "nursing facilities" (NFs). Certification requirements are detailed in the federal regulations 42 CFR 483. Federal Medicare certification allows for all or part of a facility to be certified.

Table 5 shows the percent of certified nursing facility beds for each program. The number of beds certified for Medicare-only increased slightly from 2.6 percent to 3.6 percent of the total beds in the 1993-99 period. Medicaid-only certified beds declined from 59.8 percent in 1993 to 49.3 percent in 1999, while dually certified beds increased to make up the difference. The slight increase in the number of facilities that were dually certified occurred after the federal criteria for Medicare nursing home benefits were liberalized.

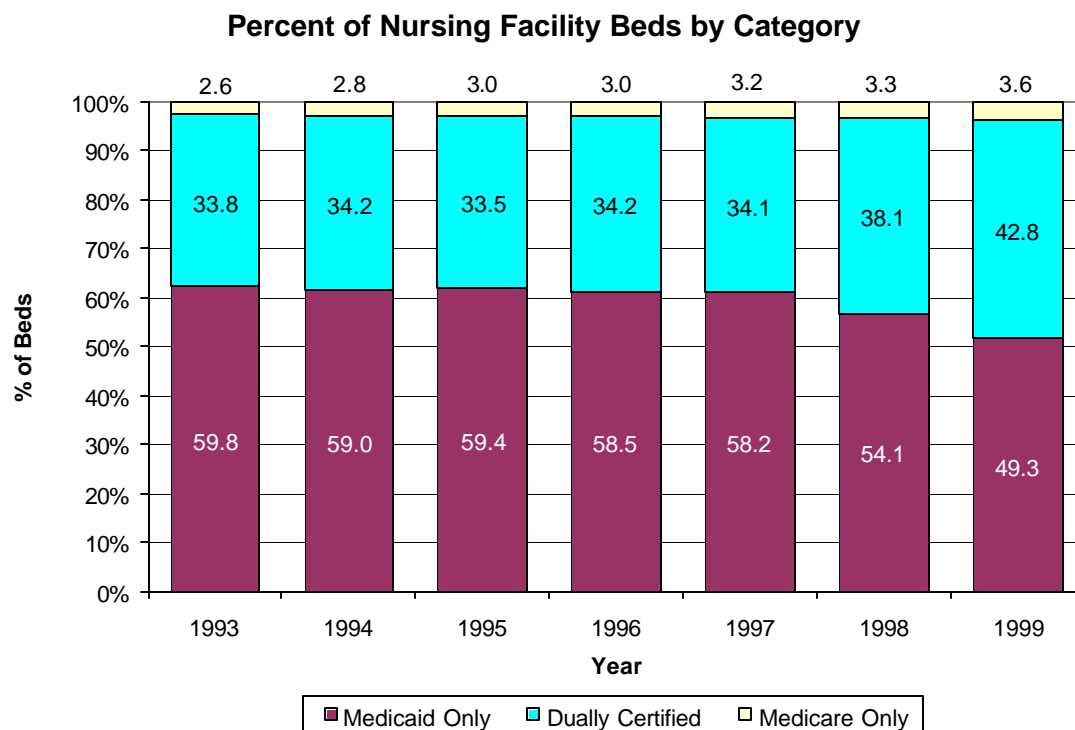


TABLE 5
PERCENT OF NURSING FACILITY BEDS BY CERTIFICATION CATEGORY IN THE U.S.

	Medicaid Only							Medicare Only							Dually Certified						
State	1993	1994	1995	1996	1997	1998	1999	1993	1994	1995	1996	1997	1998	1999	1993	1994	1995	1996	1997	1998	1999
AK	46.2	38.0	31.1	34.8	38.1	35.7	34.0	0.0	0.0	0.0	0.0	2.5	0.0	0.0	44.4	62.0	68.9	65.2	59.4	64.3	66.0
AL	58.9	59.2	60.4	58.9	60.8	57.2	55.7	1.5	2.0	1.2	1.7	1.4	1.9	1.2	38.4	37.8	37.5	38.4	37.0	39.8	42.2
AR	89.1	86.2	85.8	84.5	83.2	80.9	74.8	1.8	2.5	2.7	3.1	3.8	3.7	3.6	7.8	8.9	9.1	9.3	9.9	12.5	18.3
AZ	69.4	70.1	66.6	71.6	66.3	67.5	57.8	16.6	4.9	4.7	3.2	4.1	3.1	3.8	4.3	19.8	19.3	20.3	20.1	26.1	31.2
CA	50.8	55.6	56.1	54.3	54.0	52.9	45.3	4.6	4.2	4.3	3.7	3.7	3.6	4.2	40.7	38.0	38.1	39.4	39.2	40.1	47.9
CO	71.8	69.5	69.1	68.1	65.6	56.2	46.9	2.5	4.0	4.1	3.7	4.1	5.8	6.6	20.3	20.4	21.2	23.2	23.3	32.6	42.3
CT	23.1	32.2	31.5	34.5	34.9	26.4	21.4	1.7	1.2	1.3	0.9	0.9	1.1	0.8	73.5	65.2	65.1	63.5	61.6	69.8	76.2
DC	77.1	50.9	58.1	53.6	60.0	53.2	54.5	0.0	0.8	0.0	1.5	1.9	3.0	1.5	22.6	33.4	41.9	44.9	37.9	43.8	42.5
DE	45.3	49.6	43.5	40.8	45.5	53.2	39.9	11.2	11.6	12.9	9.7	11.5	8.5	11.0	33.4	29.3	33.6	40.4	31.9	27.4	39.2
FL	63.2	63.0	62.4	61.3	61.0	59.3	51.5	5.2	6.5	7.2	6.8	7.6	8.0	7.7	25.4	24.9	24.9	26.1	25.3	26.5	36.4
GA	73.3	68.2	68.8	64.6	65.5	55.8	55.7	0.7	0.9	1.0	0.9	1.1	1.1	1.1	24.0	29.3	28.5	32.6	31.8	42.3	42.5
HI	37.0	28.9	24.1	17.8	27.6	22.2	20.4	11.4	1.7	1.5	1.4	2.7	1.9	2.4	51.3	67.9	73.5	79.8	68.8	73.7	75.8
IA	84.5	76.8	77.8	69.7	57.6	49.7	48.4	0.4	1.6	1.6	1.1	1.1	1.0	1.0	8.2	15.2	15.9	22.8	35.0	44.5	44.5
ID	50.1	58.5	59.0	47.7	41.2	33.5	18.3	1.2	3.4	3.7	3.1	4.5	7.2	7.8	44.8	36.9	36.1	42.0	40.6	50.4	69.1
IL	81.7	77.5	76.1	76.2	75.9	75.3	74.4	2.9	3.3	3.5	3.4	3.5	3.6	3.6	8.6	11.4	11.5	11.6	11.6	12.4	13.3
IN	71.5	70.0	70.2	70.0	71.4	62.6	58.1	1.8	2.9	3.0	3.5	3.7	3.8	4.0	15.3	15.0	14.9	15.2	13.3	21.6	28.1
KS	86.9	79.5	77.0	71.0	69.2	65.5	60.5	1.6	1.6	1.8	1.8	2.1	2.0	1.7	7.3	14.6	16.8	21.2	22.1	25.9	30.5
KY	42.5	43.6	45.5	45.6	46.3	41.4	36.3	3.3	4.4	4.2	4.2	3.9	5.3	6.5	48.4	46.2	45.1	45.4	45.6	48.2	53.2
LA	88.0	83.5	83.8	82.2	81.4	76.0	70.9	2.2	2.9	3.1	3.6	3.8	4.1	3.6	5.8	9.2	8.9	10.3	10.3	15.1	20.1
MA	52.5	51.9	51.3	53.7	55.7	49.5	41.0	0.5	0.4	0.5	0.5	0.9	0.9	0.9	45.5	46.2	46.7	44.4	41.8	48.0	56.4
MD	43.4	49.5	53.0	50.5	55.4	51.9	51.6	3.1	3.3	3.3	2.3	2.2	2.3	3.1	49.4	43.0	39.5	43.0	38.0	39.4	40.1
ME	77.8	69.7	67.7	65.7	62.2	56.0	41.2	15.6	19.3	20.4	13.4	10.7	7.7	1.5	6.6	10.8	11.1	20.5	26.6	36.3	57.3
MI	55.5	56.2	57.1	54.8	55.5	53.9	47.8	2.0	2.4	2.5	3.1	3.5	3.3	4.0	38.0	37.5	36.3	36.0	36.7	37.9	43.7
MN	16.7	19.1	18.3	20.4	20.0	17.9	16.0	0.8	1.4	1.1	1.3	0.6	0.9	0.9	81.5	78.1	79.5	76.8	78.7	80.2	81.9
MO	76.9	74.4	72.8	75.3	75.0	74.4	73.2	3.9	3.5	3.8	3.6	3.7	3.9	3.7	10.5	13.5	13.1	12.0	12.5	13.6	15.1
MS	86.1	83.7	81.2	79.3	78.4	74.6	67.9	0.7	1.5	2.8	3.9	5.0	4.0	2.8	12.6	14.4	14.9	15.6	15.6	20.9	29.2
MT	39.0	45.5	44.6	45.6	43.1	34.1	23.5	0.9	1.0	1.2	1.6	1.9	0.8	1.0	60.1	53.3	54.0	52.6	54.5	64.1	74.8
NC	56.4	56.8	58.1	60.2	61.1	55.4	49.1	1.6	2.0	2.0	2.3	1.9	2.3	1.9	41.9	40.7	39.7	37.3	36.0	41.3	47.9
ND	0.0	0.0	2.6	3.3	2.3	0.0	0.0	0.3	1.2	2.5	2.3	2.0	1.2	2.0	99.7	98.8	94.9	94.4	95.7	98.8	98.0
NE	86.3	79.6	75.2	67.1	64.4	55.6	51.3	0.5	0.7	0.9	1.1	1.3	1.6	2.1	10.6	16.7	20.3	27.8	29.9	38.4	41.6
NH	88.4	70.5	68.6	67.5	60.6	59.0	42.2	1.3	0.6	1.9	1.5	1.7	1.2	1.3	8.7	28.0	29.1	30.5	37.0	36.3	55.2
NJ	53.0	55.7	54.2	58.0	57.9	48.8	39.7	1.8	2.2	3.2	2.9	2.9	3.4	4.2	44.3	40.3	40.4	37.9	37.3	46.0	54.3
NM	86.2	74.3	73.4	69.4	72.8	64.8	65.8	0.0	1.5	1.7	3.0	2.5	4.4	3.0	12.8	20.6	21.2	23.3	22.0	27.2	29.0
NV	0.6	10.5	4.4	7.8	1.3	7.6	5.5	16.9	15.2	17.5	18.3	20.7	18.8	14.8	82.5	72.9	78.1	73.8	77.1	73.6	77.9
NY	0.3	0.3	0.2	0.1	0.2	0.2	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	99.5	99.7	99.7	99.5	99.6	99.7	99.5
OH	51.4	54.6	55.8	53.8	57.0	52.1	46.6	2.8	2.7	2.4	2.6	2.6	2.3	2.5	36.9	33.3	32.5	33.2	31.4	36.7	41.5
OK	94.3	90.4	90.1	90.5	87.2	81.1	70.8	2.1	2.2	2.1	2.3	2.4	2.7	2.7	1.7	5.3	6.2	5.5	8.4	14.4	24.1
OR	75.4	71.2	73.0	75.9	72.4	62.4	51.5	1.2	2.0	1.6	1.4	1.6	3.7	4.5	19.6	23.8	22.2	22.2	23.6	31.4	40.7
PA	46.2	50.5	51.4	52.5	54.5	53.2	49.6	3.5	3.5	4.1	4.0	4.7	4.9	4.6	49.1	45.1	43.6	42.4	39.8	41.0	45.1
RI	59.2	58.2	57.8	59.2	56.8	50.8	41.0	0.2	0.1	0.1	0.1	0.1	1.2	0.0	38.1	41.2	40.9	39.7	41.6	46.9	56.5
SC	27.3	37.7	38.8	40.7	41.9	39.4	36.4	5.6	4.7	4.7	5.1	6.3	5.4	4.6	60.7	52.4	50.2	47.4	45.4	48.5	54.2
SD	79.0	61.5	57.5	48.8	40.1	35.0	39.9	0.6	0.6	0.8	0.6	0.0	0.0	0.8	20.2	37.9	41.7	50.6	59.7	65.0	59.2
TN	77.2	74.7	73.0	73.4	72.2	70.9	69.1	1.5	2.0	2.2	2.6	3.2	3.2	3.6	20.0	21.9	23.5	22.7	22.5	24.3	25.7
TX	79.9	76.2	75.4	73.9	73.0	69.4	62.6	3.3	4.3	4.5	4.7	5.1	5.0	5.5	10.1	11.8	12.0	12.6	14.0	15.5	20.9
UT	75.7	70.3	72.6	61.0	74.4	67.0	46.0	14.4	18.9	20.2	20.5	19.9	19.7	15.6	9.1	10.0	7.0	16.7	4.7	11.3	37.6
VA	79.5	79.3	78.0	78.9	77.1	75.5	70.5	1.5	1.7	2.0	1.6	2.1	2.7	2.5	16.6	16.6	17.1	16.6	18.0	19.3	23.7
VT	60.2	46.9	47.4	49.7	48.0	38.6	9.9	0.0	0.0	0.0	0.0	0.0	14.4	18.9	31.9	51.0	49.7	50.3	51.8	45.6	70.3
WA	70.6	70.4	71.0	70.1	65.9	59.3	50.8	0.9	0.7	0.7	0.5	0.9	1.4	1.1	26.5	27.0	26.7	27.0	29.5	36.4	44.1
WI	69.0	61.6	61.4	57.6	52.9	45.1	38.3	0.6	0.3	0.4	1.0	1.1	1.5	7.5	30.3	38.0	38.1	41.2	45.7	53.2	54.0
WV	75.4	65.7	62.3	68.3	46.2	57.0	53.9	1.9	1.9	2.0	3.2	4.0	5.8	4.3	22.0	31.6	35.6	27.2	25.6	36.2	41.3
WY	65.1	54.6	56.3	57.1	55.7	27.5	21.2	1.5	1.2	1.1	1.1	1.1	1.5	3.3	33.3	44.3	42.6	41.7	42.7	70.6	75.2
US	59.8	59.0	59.4	58.5	58.2	54.1	49.3	2.6	2.8	3.0	3.0	3.2	3.3	3.6	33.8	34.2	33.5	34.2	34.1	38.1	42.8

Residents by Payer Source

The percent of certified nursing facility residents by primary payer source is shown in Table 6. The percentage of total residents primarily paid for by Medicaid was about 67-69 percent of total residents in the 1993-1999 period. Medicare paid for 8.6 percent of total residents in 1999, increasing from 6.2 percent in 1993. Private payers and other sources declined from 25.2 percent in 1993 to 23.7 percent in 1999. The increase in Medicare residents was consistent with the liberalization of Medicare eligibility requirements.

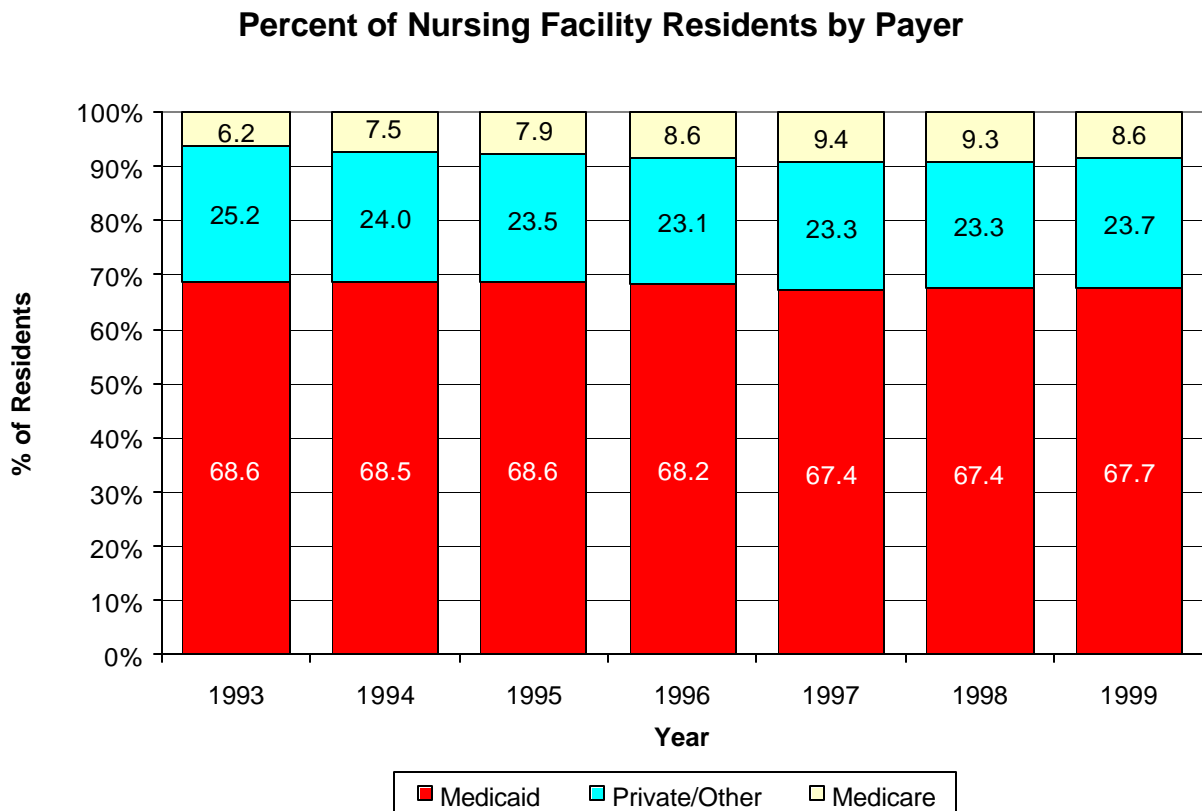


TABLE 6
PERCENT OF CERTIFIED NURSING FACILITY RESIDENTS BY PRIMARY PAYER SOURCE

	Medicaid								Medicare								Private/Other							
State	1993	1994	1995	1996	1997	1998	1999	1993	1994	1995	1996	1997	1998	1999	1993	1994	1995	1996	1997	1998	1999			
AK	85.7	86.0	79.7	85.5	80.7	81.5	84.4	5.7	6.7	11.6	7.0	9.5	9.8	6.5	8.7	7.3	8.7	7.5	9.7	8.7	9.0			
AL	71.8	73.2	73.7	72.8	71.0	71.3	73.2	6.7	7.8	8.8	9.3	10.3	9.7	9.9	21.4	19.0	17.5	17.9	18.8	19.0	16.9			
AR	77.5	76.2	76.2	75.7	73.8	74.4	74.9	4.2	5.1	5.8	6.8	7.7	7.7	6.9	18.4	18.7	18.0	17.5	18.5	17.9	18.2			
AZ	58.8	60.8	60.0	58.4	54.2	61.5	63.8	9.6	9.7	10.4	10.0	13.5	10.2	7.6	31.6	29.5	29.6	31.6	32.3	28.3	28.6			
CA	66.2	66.1	65.9	64.7	64.7	64.2	65.2	8.5	9.1	9.2	9.5	9.6	9.4	8.3	25.3	24.8	24.8	25.9	25.8	26.4	26.6			
CO	62.0	62.1	62.1	62.1	61.5	61.2	62.5	6.5	7.3	7.4	7.6	8.1	8.4	6.4	31.5	30.6	30.5	30.2	30.4	30.4	31.1			
CT	68.0	68.2	68.5	68.5	67.9	68.1	67.7	8.4	9.8	10.4	10.9	11.5	11.1	11.0	23.6	22.0	21.0	20.6	20.6	20.8	21.3			
DC	91.2	87.4	86.9	81.9	81.3	83.0	81.3	2.7	4.3	7.4	8.9	8.5	7.6	7.2	6.2	8.2	5.8	9.2	10.3	9.5	11.5			
DE	54.9	54.4	50.5	59.6	49.7	57.2	56.3	5.7	7.3	9.0	9.0	15.9	14.5	10.5	39.4	38.3	40.5	31.4	34.4	28.2	33.2			
FL	62.3	64.0	63.9	63.6	63.5	63.4	64.3	10.9	12.2	14.4	14.3	14.6	14.3	13.3	26.9	23.9	21.7	22.1	21.9	22.2	22.4			
GA	82.2	82.0	80.7	80.2	77.3	77.8	77.8	4.3	5.4	6.1	6.8	8.1	8.2	7.6	13.5	12.6	13.2	13.0	14.6	14.0	14.6			
HI	71.7	77.8	73.9	79.0	73.5	72.1	76.2	4.9	5.1	10.5	7.6	8.1	7.8	6.4	23.4	17.1	15.6	13.5	18.4	20.1	17.4			
IA	48.7	47.6	51.1	49.5	50.0	49.2	50.0	3.7	4.3	3.0	3.5	4.0	4.1	3.9	47.6	48.1	45.9	47.0	46.0	46.6	46.1			
ID	61.3	59.5	61.7	63.9	61.9	64.2	60.8	7.8	10.5	10.8	10.6	12.6	11.7	12.5	30.9	30.1	27.5	25.5	25.5	24.1	26.7			
IL	64.1	64.2	64.5	64.3	64.0	63.4	63.6	5.1	6.1	6.4	6.9	7.3	7.2	7.1	30.8	29.7	29.0	28.8	28.7	29.4	29.3			
IN	66.2	67.2	67.8	65.9	65.0	64.7	64.7	7.0	7.4	7.8	8.9	10.0	10.3	9.5	26.7	25.5	24.4	25.2	25.1	25.1	25.7			
KS	49.9	46.4	53.1	53.4	52.6	52.8	53.6	5.6	9.2	4.1	4.8	5.7	5.0	4.8	44.5	44.4	42.9	41.8	41.8	42.2	41.6			
KY	76.2	75.4	76.4	75.8	75.5	75.3	74.9	7.5	9.4	9.9	9.2	10.0	10.0	9.9	16.3	15.2	13.8	15.1	14.5	14.7	15.2			
LA	81.9	83.0	83.1	82.8	80.4	79.7	79.4	2.7	3.0	3.3	4.5	5.5	5.6	4.2	15.5	14.1	13.6	12.7	14.0	14.7	16.4			
MA	72.9	72.0	71.2	70.6	70.4	70.5	71.7	7.5	8.6	10.0	10.6	10.9	10.5	8.8	19.7	19.4	18.8	18.9	18.6	19.0	19.4			
MD	67.1	66.5	66.0	64.8	65.8	63.2	64.3	5.2	6.0	7.6	8.5	9.7	9.6	11.7	27.7	27.5	26.4	26.8	24.5	27.2	24.0			
ME	78.3	77.2	75.4	74.7	72.4	70.9	71.8	3.0	4.6	7.1	9.2	10.7	11.6	9.3	18.7	18.1	17.5	16.1	16.9	17.6	18.9			
MI	67.3	67.5	66.1	66.3	66.2	66.5	66.9	9.5	11.5	11.9	12.5	13.0	12.1	11.8	23.2	21.1	22.0	21.2	20.8	21.3	21.3			
MN	63.7	63.3	63.8	63.7	62.7	61.0	62.2	5.7	7.1	7.9	7.9	7.6	8.1	6.6	30.6	29.6	28.3	28.4	29.7	30.9	31.2			
MO	64.5	64.5	65.4	65.7	63.5	64.2	65.2	8.8	9.4	8.6	8.9	9.2	8.4	7.5	26.7	26.0	26.0	25.4	27.3	27.4	27.4			
MS	82.3	78.3	79.9	78.4	77.7	79.4	82.1	3.0	5.1	5.5	7.7	8.5	8.5	6.8	14.7	16.5	14.6	13.9	13.8	12.1	11.0			
MT	61.5	61.6	61.0	60.1	60.5	57.8	56.8	5.5	6.9	7.1	7.3	8.1	8.3	7.1	33.0	31.6	31.9	32.6	31.4	33.8	36.1			
NC	76.1	75.2	75.0	74.0	73.8	73.7	74.0	7.5	8.7	9.5	10.7	11.0	12.2	11.0	16.4	16.1	15.4	15.3	15.2	14.1	15.0			
ND	57.2	57.9	56.3	55.4	56.0	54.3	54.2	2.9	3.6	4.3	5.3	4.6	4.8	4.6	39.9	38.5	39.4	39.3	39.4	40.9	41.2			
NE	52.7	50.2	53.1	53.7	53.5	53.0	53.0	3.7	6.1	4.3	5.2	5.9	5.6	5.8	43.6	43.6	42.5	41.0	40.6	41.3	41.2			
NH	71.9	66.5	68.4	72.3	70.8	69.0	66.5	3.0	9.1	9.8	5.5	7.1	7.0	12.4	25.1	24.3	21.8	22.3	22.1	24.0	21.1			
NJ	69.4	70.4	69.6	71.6	69.9	69.5	68.0	4.2	4.7	6.1	6.7	7.7	8.5	8.9	26.4	24.9	24.3	21.7	22.4	22.0	23.1			
NM	71.5	71.8	69.8	70.1	68.1	67.4	68.1	3.3	3.9	5.9	6.4	7.4	8.1	7.0	25.2	24.2	24.3	23.5	24.5	24.6	24.9			
NV	65.0	68.1	62.5	62.4	60.5	61.9	65.5	8.9	8.5	10.9	11.0	12.4	10.9	7.9	26.1	23.4	26.6	26.6	27.2	27.2	26.6			
NY	78.6	77.1	77.0	76.6	75.2	74.3	75.1	6.4	8.4	7.9	10.1	11.4	11.5	9.7	15.0	14.6	15.1	13.2	13.4	14.2	15.2			
OH	69.4	68.4	69.2	67.6	66.4	66.4	65.8	5.4	7.2	7.1	8.7	9.1	8.9	8.5	25.2	24.5	23.8	23.7	24.5	24.7	25.7			
OK	65.7	69.0	66.5	67.0	66.6	66.6	62.6	2.2	2.7	3.4	4.1	5.4	5.2	5.3	32.2	28.3	30.1	28.9	27.9	28.2	32.1			
OR	61.0	60.8	61.3	62.8	60.4	62.3	63.0	6.9	7.9	6.8	6.6	8.3	7.1	7.3	32.1	31.3	31.8	30.6	31.3	30.6	29.7			
PA	63.8	63.7	63.8	63.5	63.1	63.7	63.9	7.2	7.9	8.4	9.2	9.8	9.3	8.8	29.0	28.4	27.8	27.3	27.1	27.1	27.3			
RI	75.2	75.9	75.5	74.6	73.1	73.3	74.1	5.4	5.3	6.8	7.2	9.3	10.4	6.8	19.4	18.7	17.7	18.2	17.6	16.3	19.1			
SC	73.6	74.0	72.3	72.6	70.9	70.7	73.6	6.6	8.1	8.9	10.4	11.9	12.6	10.8	19.9	17.9	18.8	17.0	17.2	16.7	15.6			
SD	55.6	56.2	58.1	57.6	57.7	58.9	60.7	3.5	4.5	4.4	6.4	6.5	6.0	6.2	41.0	39.3	37.5	36.0	35.8	35.1	33.0			
TN	76.9	74.4	74.9	73.4	73.1	72.4	73.7	5.6	8.3	8.4	9.3	10.0	10.3	9.5	17.5	17.3	16.6	17.3	16.9	17.3	16.9			
TX	75.6	75.1	74.6	73.9	74.7	75.0	74.0	4.6	6.3	7.6	8.6	9.2	8.8	8.0	19.8	18.6	17.8	17.6	16.0	16.2	18.0			
UT	64.7	62.1	61.8	59.8	61.3	60.3	60.1	8.1	9.6	10.9	11.1	11.2	11.6	14.4	27.2	28.3	27.3	29.1	27.6	28.2	25.5			
VA	70.0	68.3	68.5	68.5	67.0	67.2	66.5	4.9	6.0	7.1	7.5	9.0	8.7	9.1	25.2	25.7	24.5	24.0	24.0	24.1	24.4			
VT	67.5	60.3	70.3	70.6	63.4	66.3	59.6	2.6	4.2	5.1	6.2	10.1	11.9	15.7	29.9	35.6	24.6	23.2	26.5	21.9	24.7			
WA	66.5	67.6	67.1	66.0	63.4	64.0	64.3	7.6	8.4	9.2	9.5	10.5	10.5	9.2	26.0	24.0	23.7	24.4	26.2	25.5	26.5			
WI	67.8	67.2	67.1	67.0	65.9	67.1	66.5	5.1	6.4	6.6	7.4	7.9	8.4	8.0	27.1	26.3	26.3	25.6	26.2	24.6	25.5			
WV	75.3	76.0	78.0	73.5	74.1	72.8	73.9	5.1	5.5	4.5	8.8	8.6	11.0	9.6	19.7	18.5	17.5	17.7	17.4	16.2	16.5			
WY	65.6	62.2	64.5	65.0	65.9	62.3	64.4	3.5	6.5	7.1	6.5	6.2	7.8	8.5	31.0	31.2	28.4	28.5	28.0	29.9	27.1			
US	68.6	68.5	68.6	68.2	67.4	67.4	67.7	6.2	7.5	7.9														

Distribution of Facilities by Ownership Type

Nursing facility ownership patterns were fairly stable in the 1993-1999 period, when the large majority of nursing facilities were proprietary. Table 7 shows the percent of for-profit facilities was 64.8 percent in 1999. Non-profit facilities were 28.6 percent and government owned facilities were 6.7 percent.

Ownership patterns vary widely across states. Alaska and Wyoming have a high percentage of government owned facilities. Alaska, District of Columbia, Minnesota, North Dakota, Pennsylvania and South Dakota have a high percentage of non-profit facilities. Arkansas, Oklahoma, and Texas have the highest percentages of proprietary facilities.

Percent Distribution by Ownership Type

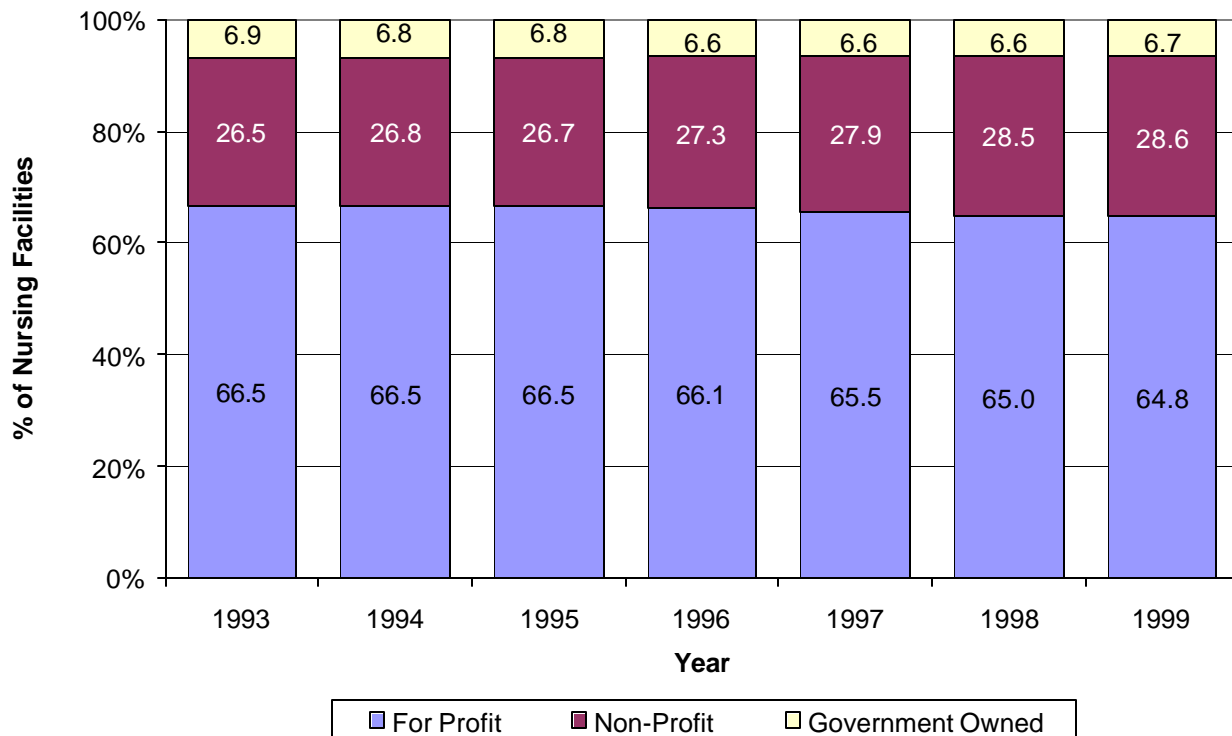


TABLE 7
PERCENT DISTRIBUTION OF NURSING FACILITIES BY OWNERSHIP TYPE

State	For Profit							Non-Profit							Government Owned						
	1993	1994	1995	1996	1997	1998	1999	1993	1994	1995	1996	1997	1998	1999	1993	1994	1995	1996	1997	1998	1999
AK	8.3	7.1	7.7	6.3	7.1	7.1	7.1	50.0	50.0	46.2	56.3	57.1	57.1	57.1	41.7	42.9	46.2	37.5	35.7	35.7	35.7
AL	78.4	76.8	76.3	76.4	76.5	76.4	75.8	12.4	12.8	12.6	13.5	14.3	13.9	14.1	9.3	10.3	11.1	10.1	9.2	9.7	10.1
AR	81.2	80.2	81.9	79.7	78.8	80.1	77.4	14.2	14.5	13.1	15.2	16.1	14.8	16.6	4.6	5.4	5.0	5.1	5.1	5.1	6.0
AZ	62.7	63.0	67.0	62.0	65.3	63.6	65.5	34.8	35.6	30.4	36.6	33.9	34.1	31.0	2.5	1.5	2.7	1.4	0.8	2.3	3.4
CA	73.0	73.4	73.8	73.8	74.0	74.2	74.9	23.1	22.3	22.0	21.9	21.7	22.2	21.4	3.9	4.2	4.2	4.3	4.2	3.6	3.7
CO	60.0	63.5	62.1	62.6	63.0	62.3	63.9	29.5	27.4	26.6	26.3	26.9	27.8	25.6	10.5	9.1	11.3	11.1	10.1	9.9	10.5
CT	77.8	78.8	77.7	79.4	77.9	77.8	76.1	21.8	20.8	21.5	19.7	21.3	21.8	23.1	0.4	0.4	0.8	0.9	0.8	0.4	0.8
DC	40.0	33.3	38.5	33.3	31.8	14.3	28.6	40.0	50.0	46.2	61.1	59.1	71.4	71.4	20.0	16.7	15.4	5.6	9.1	14.3	0.0
DE	59.5	51.2	42.4	54.1	42.9	40.7	47.1	32.4	39.5	45.5	37.8	47.6	48.1	44.1	8.1	9.3	12.1	8.1	9.5	11.1	8.8
FL	78.2	77.9	76.4	75.9	77.7	77.4	76.3	19.4	19.6	21.3	21.8	20.5	20.8	21.9	2.5	2.4	2.3	2.2	1.8	1.8	1.9
GA	75.2	74.3	75.1	75.6	76.6	75.4	76.3	16.8	17.5	16.7	17.6	16.4	17.7	17.2	8.0	8.3	8.2	6.8	7.0	6.9	6.5
HI	40.0	34.6	38.1	37.5	42.9	43.2	46.2	36.0	34.6	33.3	35.0	33.3	31.8	28.2	24.0	30.8	28.6	27.5	23.8	25.0	25.6
IA	54.1	55.2	53.9	53.4	53.1	54.4	50.6	39.9	39.4	41.0	41.3	42.0	40.6	44.9	6.0	5.3	5.1	5.4	4.9	5.0	4.5
ID	58.5	59.0	57.5	59.5	61.0	58.2	60.3	16.9	16.7	18.8	14.9	15.6	17.7	16.7	24.6	24.4	23.8	25.7	23.4	24.1	23.1
IL	64.0	64.2	63.8	64.3	64.5	63.3	65.1	29.8	30.1	30.2	29.8	30.3	31.1	29.6	6.2	5.7	6.0	5.8	5.1	5.6	5.3
IN	77.9	77.4	77.2	74.9	74.8	73.7	72.2	19.9	20.2	20.5	22.3	22.3	23.5	24.6	2.2	2.4	2.3	2.8	2.9	2.8	3.2
KS	56.8	54.3	54.4	54.0	53.0	52.3	50.5	29.5	33.0	33.1	32.5	34.2	33.5	35.5	13.7	12.7	12.6	13.6	12.8	14.3	14.0
KY	68.3	68.3	68.4	67.1	64.2	64.8	63.5	28.2	28.6	28.2	28.9	31.9	32.2	33.0	3.5	3.1	3.4	3.9	3.8	3.0	3.5
LA	77.3	73.8	74.0	74.8	73.3	73.2	73.8	18.0	18.7	18.7	17.9	19.3	19.5	18.5	4.8	7.5	7.3	7.3	7.4	7.4	7.7
MA	79.6	77.8	76.4	74.5	71.1	68.6	71.8	17.7	20.0	21.3	23.0	26.5	28.7	25.6	2.7	2.2	2.3	2.5	2.5	2.7	2.6
MD	67.2	63.0	62.4	57.5	57.7	56.7	52.2	29.6	33.5	34.4	39.6	39.1	40.9	43.3	3.2	3.5	3.2	2.9	3.3	2.3	4.5
ME	82.4	74.0	72.2	72.8	72.0	74.6	69.3	14.4	22.1	23.5	23.2	24.8	22.0	26.3	3.2	3.8	4.3	4.0	3.2	3.4	4.4
MI	62.1	62.6	65.0	62.8	63.5	61.9	63.2	27.4	27.2	25.1	27.7	26.6	27.9	27.1	10.5	10.2	9.8	9.5	9.9	10.2	9.7
MN	31.8	31.4	31.8	35.2	30.4	30.9	29.3	52.2	54.5	52.6	50.8	54.6	56.4	56.7	15.9	14.1	15.5	14.0	14.9	12.7	14.0
MO	64.6	64.4	65.0	64.7	65.3	63.2	65.7	27.0	26.8	26.8	26.0	26.3	27.8	25.0	8.3	8.8	8.2	9.3	8.4	9.0	9.3
MS	75.6	72.8	72.4	70.5	68.7	68.5	70.3	9.8	10.5	11.1	13.7	16.9	16.5	15.9	14.6	16.7	16.6	15.8	14.4	15.0	13.7
MT	43.2	40.6	39.0	37.6	36.8	35.9	35.1	37.9	38.5	41.0	43.0	45.3	46.7	46.4	19.0	20.8	20.0	19.4	17.9	17.4	18.6
NC	75.0	74.5	73.8	74.0	73.4	73.5	73.0	20.4	20.9	21.8	21.9	22.2	22.9	22.6	4.6	4.6	4.4	4.1	4.5	3.6	4.3
ND	11.3	9.9	12.0	11.5	13.3	11.4	12.6	88.8	87.7	85.5	86.2	84.0	85.2	82.8	0.0	2.5	2.4	2.3	2.7	3.4	4.6
NE	45.2	45.2	44.7	45.4	45.1	45.7	45.2	30.6	30.8	32.7	32.3	32.6	31.7	33.5	24.2	24.0	22.6	22.3	22.3	22.6	21.3
NH	48.5	50.7	52.8	54.3	52.0	54.7	53.0	39.4	31.3	31.9	30.0	33.3	29.3	33.3	12.1	17.9	15.3	15.7	14.7	16.0	13.6
NJ	66.2	64.6	66.7	63.8	64.4	60.5	60.7	28.5	28.2	27.1	29.6	30.1	34.6	34.0	5.3	7.1	6.3	6.6	5.5	4.9	5.3
NM	59.4	57.1	58.4	58.2	58.7	65.2	61.0	31.9	32.5	29.9	32.9	30.2	28.8	32.5	8.7	10.4	11.7	8.9	11.1	6.1	6.5
NV	74.2	77.5	77.8	74.4	73.7	78.0	70.0	12.9	7.5	11.1	12.8	7.9	7.3	20.0	12.9	15.0	11.1	12.8	18.4	14.6	10.0
NY	46.2	47.8	47.9	46.2	47.2	48.0	46.3	44.5	43.2	43.3	45.0	42.7	43.1	45.6	9.4	9.0	8.8	8.8	10.2	8.9	8.1
OH	74.9	73.5	75.1	73.4	73.2	73.6	70.3	21.5	22.9	21.7	23.3	23.5	23.4	26.3	3.6	3.7	3.2	3.3	3.3	2.9	3.4
OK	83.4	81.8	82.2	81.8	79.1	78.8	81.4	13.6	13.5	12.8	13.5	14.4	14.1	13.4	3.0	4.7	5.0	4.7	6.5	7.1	5.2
OR	75.6	76.7	74.0	77.3	75.0	74.8	74.6	19.2	19.3	21.3	18.8	21.7	21.9	21.1	5.1	4.0	4.7	3.9	3.3	3.2	4.2
PA	46.0	45.2	43.8	41.8	41.2	41.0	42.4	45.9	47.9	49.4	51.9	53.3	53.4	52.0	8.1	6.9	6.9	6.2	5.5	5.6	5.6
RI	76.6	78.3	78.0	74.4	77.2	77.5	75.0	23.4	21.7	22.0	25.6	22.8	22.5	25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SC	75.6	73.9	73.4	73.9	75.4	74.8	75.5	12.6	15.7	13.6	15.2	12.6	13.5	12.9	11.9	10.4	13.0	10.9	12.0	11.7	11.6
SD	31.5	34.9	32.4	36.0	36.6	34.9	38.8	63.9	60.4	63.1	60.0	59.4	59.3	55.3	4.6	4.7	4.5	4.0	4.0	5.8	5.9
TN	72.3	69.5	70.3	69.4	69.2	67.6	67.1	20.1	22.1	22.3	22.2	22.9	22.6	22.5	7.6	8.4	7.3	8.3	7.9	9.7	10.4
TX	83.8	82.5	81.6	83.1	80.9	81.0	80.3	13.0	14.7	15.7	14.2	15.8	15.8	16.6	3.2	2.8	2.7	2.8	3.3	3.3	3.1
UT	75.0	77.8	80.3	79.7	81.3	77.5	75.7	17.0	16.7	14.5	16.5	14.3	18.0	18.9	8.0	5.6	5.3	3.8	4.4	4.5	5.4
VA	61.9	62.0	65.1	64.3	64.1	61.9	62.7	32.0	32.7	30.3	31.3	32.5	33.3	33.5	6.2	5.3	4.6	4.4	3.4	4.8	3.8
VT	70.7	72.2	75.0	75.7	73.0	64.7	64.3	24.4	22.2	22.5	21.6	27.0	32.4	33.3	4.9	5.6	2.5	2.7	0.0	2.9	2.4
WA	71.1	70.6	70.6	70.0	68.1	68.3	68.7	22.0	21.6	21.6	22.1	23.9	24.0	22.6	6.8	7.8	7.8	7.9	8.0	7.7	8.7
WI	50.0	49.2	48.0	48.3	47.6	49.0	48.9	34.0	35.3	36.8	36.8	37.6	36.4	35.8	16.0	15.5	15.3	14.9	14.8	14.6	15.4
WV	68.8	66.4	64.2	65.5	61.5	65.2	64.9	22.5	23.4	23.9	23.6	28.2	30.4	24.6	8.8	10.2	11.9	10.9	10.3	4.3	10.4
WY	39.3	44.1	44.7	48.6	44.4	45.0	44.4	21.4	20.6	21.1	13.5	16.7	15.0	13.9	39.3	35.3	34.2	37.8	38.9	40.0	41.7
US	66.5	66.5	66.5	66.1	65.5	65.0	64.8	26.5	26.8	26.7	27.3	27.9	28.5	28.6	6.9	6.8	6.8	6.6	6.6	6.6	6.7

Facilities By Affiliation

Table 8 shows the percent of facilities which were owned or leased by multi-facility organizations (chains). The percentage that were owned or leased by chains increased from 48.4 percent in 1993 to 55.8 percent in 1999.

A number of nursing facilities are hospital-based. Table 8 shows that certified facilities increased from 10.9 percent in 1993 to 13.2 percent in 1999. This supports the conversion of hospital acute care beds to nursing facility beds.

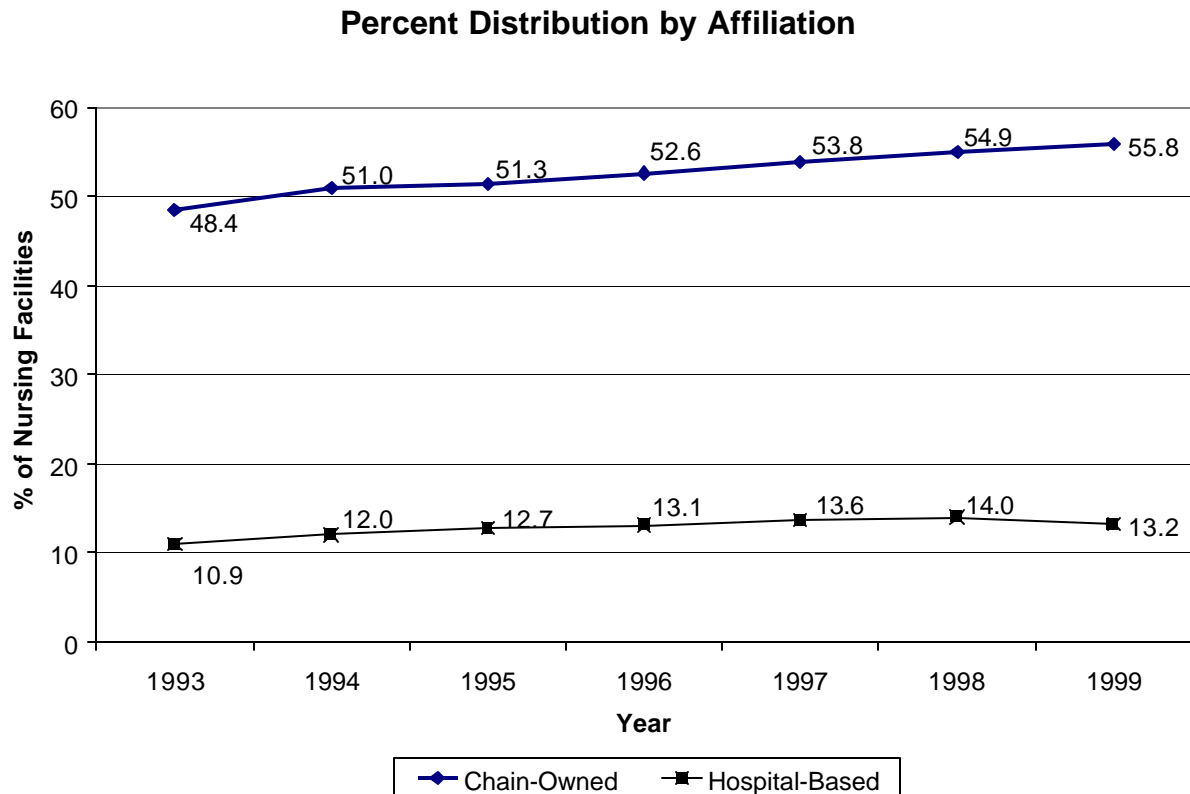


TABLE 8
PERCENT DISTRIBUTION OF CERTIFIED NURSING FACILITIES BY AFFILIATION IN THE U.S.

	Chain-Owned							Hospital-Based						
State	1993	1994	1995	1996	1997	1998	1999	1993	1994	1995	1996	1997	1998	1999
AK	25.0	14.3	15.4	31.3	28.6	28.6	35.7	58.3	57.1	61.5	62.5	57.1	64.3	64.3
AL	57.2	62.1	60.6	61.5	63.3	62.0	63.6	9.3	9.9	10.6	11.1	11.2	11.1	10.1
AR	52.3	55.8	53.1	55.1	54.5	54.2	53.5	8.4	9.5	10.0	12.1	12.9	11.4	12.4
AZ	59.3	68.1	66.1	69.7	72.9	65.1	73.6	17.8	20.7	19.6	23.2	20.3	21.7	17.2
CA	51.4	56.5	56.9	59.3	59.9	62.6	62.4	15.1	16.4	18.2	17.2	18.8	18.1	16.7
CO	63.0	67.0	64.5	65.8	64.4	65.6	67.6	15.0	17.3	17.7	16.3	16.3	15.6	15.1
CT	32.5	40.8	38.2	44.7	46.6	47.6	49.2	2.1	1.6	1.6	2.2	2.0	1.8	2.1
DC	20.0	22.2	30.8	22.2	27.3	14.3	21.4	6.7	16.7	15.4	27.8	27.3	28.6	28.6
DE	56.8	62.8	57.6	62.2	57.1	63.0	55.9	5.4	4.7	6.1	2.7	9.5	11.1	2.9
FL	65.2	70.3	70.7	72.4	73.7	71.7	72.8	7.0	7.5	8.8	9.9	10.0	11.1	10.9
GA	65.2	68.3	68.6	72.5	72.6	73.7	73.9	15.0	16.9	16.7	16.7	17.1	16.6	15.7
HI	24.0	30.8	28.6	27.5	35.7	34.1	41.0	44.0	42.3	45.2	47.5	42.9	43.2	43.6
IA	49.3	47.8	49.0	48.3	51.8	50.8	47.9	10.8	11.4	11.4	11.7	10.3	11.5	11.2
ID	60.0	59.0	61.3	58.1	62.3	64.6	69.2	26.1	30.8	32.5	32.4	33.8	32.9	30.8
IL	39.0	39.9	39.5	41.1	43.8	44.6	45.9	10.2	11.0	11.5	11.5	12.5	12.7	11.6
IN	64.6	62.5	62.3	64.7	66.1	64.8	63.3	6.6	8.2	8.8	10.2	10.6	11.5	11.3
KS	50.6	51.2	51.5	51.1	51.9	53.3	54.7	13.9	15.0	14.9	17.5	17.1	16.3	16.6
KY	49.8	54.4	56.8	55.7	56.5	54.6	57.4	15.4	18.9	18.8	19.6	20.4	20.4	21.3
LA	47.1	47.9	49.5	48.5	48.7	46.9	47.3	13.6	16.7	15.6	17.6	16.9	16.8	15.4
MA	40.3	44.6	43.8	46.6	51.2	52.8	53.8	1.9	3.3	5.4	6.2	8.1	8.6	7.2
MD	37.0	43.0	44.6	43.5	47.4	49.7	53.7	5.3	6.0	8.1	11.1	12.6	16.4	17.9
ME	37.6	42.0	40.0	44.8	48.0	45.8	47.4	7.2	9.9	11.3	9.6	10.4	9.3	10.5
MI	45.0	44.2	44.5	47.9	48.0	50.8	51.7	4.5	5.6	5.7	5.6	5.9	6.9	6.7
MN	45.0	49.7	47.1	49.2	49.0	51.4	50.6	16.6	16.4	15.8	16.8	15.5	17.0	15.3
MO	46.9	51.4	48.5	48.9	47.4	47.4	49.0	14.6	14.4	15.1	14.0	13.3	14.6	13.0
MS	47.0	47.5	51.8	54.7	56.2	59.0	60.4	17.1	22.2	24.6	27.4	28.9	29.0	25.3
MT	33.7	34.4	32.0	35.5	34.7	37.0	32.0	36.8	38.5	40.0	44.1	42.1	43.5	44.3
NC	61.2	62.1	63.0	62.6	65.4	67.0	67.1	11.5	12.5	13.2	13.4	13.5	14.8	13.7
ND	46.3	43.2	47.0	46.0	48.0	44.3	46.0	18.8	21.0	24.1	24.1	26.7	25.0	24.1
NE	45.7	49.8	50.0	50.2	49.8	50.4	50.0	13.7	14.5	15.0	14.4	16.3	15.7	17.0
NH	40.9	44.8	47.2	45.7	50.7	52.0	50.0	6.1	4.5	4.2	5.7	4.0	6.7	7.6
NJ	31.2	31.0	32.3	32.6	32.9	36.6	37.4	3.8	4.4	4.6	4.3	4.5	7.5	6.3
NM	62.3	63.6	61.0	65.8	65.1	71.2	67.5	13.0	18.2	19.5	17.7	19.0	15.2	10.4
NV	51.6	50.0	61.1	64.1	63.2	70.7	67.5	22.6	27.5	25.0	33.3	47.4	41.5	25.0
NY	10.1	9.9	11.7	12.0	11.8	14.3	16.8	13.2	12.8	13.0	12.7	11.8	11.7	11.8
OH	47.5	47.3	48.0	48.6	50.7	52.6	51.7	6.4	7.2	7.0	7.8	8.7	8.8	9.2
OK	35.4	39.6	40.2	43.3	41.5	42.4	45.4	6.7	7.6	7.3	7.9	9.7	10.8	8.6
OR	51.3	60.0	58.7	61.7	65.1	67.1	66.2	6.4	6.7	7.3	8.4	9.2	9.7	9.2
PA	42.0	43.5	42.8	42.8	44.1	46.3	49.5	9.6	10.7	12.8	14.4	16.5	17.1	14.9
RI	9.1	8.7	9.8	8.1	10.9	16.9	16.3	0.0	0.0	0.0	2.3	2.2	3.4	3.3
SC	46.7	58.2	57.1	64.2	62.9	65.0	72.8	9.6	11.9	11.7	12.1	13.1	14.1	16.3
SD	54.6	54.7	55.0	58.0	56.4	55.8	54.1	17.6	17.9	17.1	17.0	19.8	17.4	17.6
TN	56.4	62.1	62.3	65.4	65.4	66.5	66.3	10.7	13.1	14.0	14.2	14.4	16.0	16.1
TX	66.7	69.0	70.1	70.7	72.3	71.7	72.9	12.5	13.9	15.0	14.2	14.6	13.5	11.6
UT	59.1	66.7	68.4	68.4	70.3	75.3	73.0	13.6	18.9	18.4	13.9	16.5	20.2	18.9
VA	60.7	57.4	62.6	59.5	61.2	61.9	63.8	12.3	12.2	11.3	11.5	11.0	12.1	11.9
VT	41.5	33.3	45.0	37.8	43.2	41.2	38.1	7.3	11.1	7.5	5.4	8.1	8.8	7.1
WA	60.8	60.6	63.2	64.0	66.3	66.4	67.2	8.4	8.6	8.9	9.0	9.4	9.6	9.8
WI	40.4	40.2	40.0	40.9	43.6	45.1	47.6	7.1	8.0	8.3	8.0	10.0	9.0	8.3
WV	51.3	44.5	38.8	48.2	41.0	47.8	49.3	13.8	17.2	17.9	20.0	28.2	21.7	20.9
WY	57.1	52.9	52.6	54.1	52.8	52.5	50.0	39.3	26.5	26.3	27.0	27.8	30.0	36.1
US	48.4	51.0	51.3	52.6	53.8	54.9	55.8	10.9	12.0	12.7	13.1	13.6	14.0	13.2

Special Care Beds

Facilities reported the number of beds available in dedicated special care units. Table 9 shows the number of beds in special care units for Alzheimer's, AIDS and Hospice for 1993 through 1999. The total number of dedicated Alzheimer's beds was 76,538 in 1999. This number still is less than 5 percent of the total certified beds in the U.S.

The number of dedicated AIDS beds was 2,002 in 1999, but this represented a fraction of one percent of all beds in the U.S.

The number of hospice beds was 3,121 in 1999, but the number is also a small fraction of all certified beds in the U.S. This reflects the general trend to provide hospice care either in the home or in hospitals.

Total Number of Alzheimer Beds

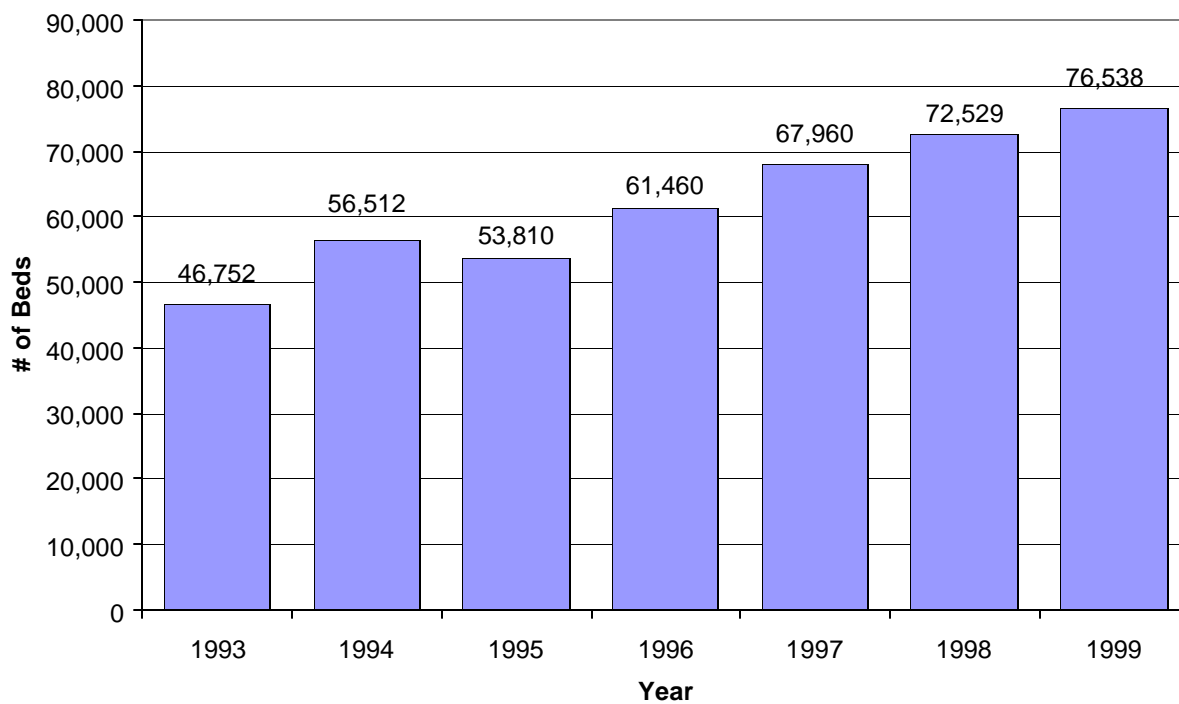


TABLE 9
TOTAL NUMBER OF SPECIAL CARE BEDS IN CERTIFIED NURSING FACILITIES IN THE U.S.

State	Alzheimers							AIDS							Hospice						
	1993	1994	1995	1996	1997	1998	1999	1993	1994	1995	1996	1997	1998	1999	1993	1994	1995	1996	1997	1998	1999
AK	0	22	22	0	0	0	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AL	281	352	254	305	383	515	464	2	0	0	0	0	0	0	21	23	23	28	45	15	15
AR	126	254	265	377	393	556	470	20	18	18	0	0	1	0	11	1	1	18	8	3	2
AZ	1,191	1,362	1,402	1,317	1,336	1,694	1,116	0	185	140	157	31	141	0	115	157	150	67	18	82	19
CA	3,898	4,760	4,001	3,936	3,978	3,893	4,794	102	350	356	460	186	94	400	391	660	694	428	356	554	717
CO	1,606	1,749	1,741	1,594	1,840	2,047	2,135	0	15	15	0	10	5	5	76	175	171	161	72	107	66
CT	1,001	1,179	1,118	1,209	1,573	1,338	1,501	0	114	106	60	187	24	30	11	34	47	48	172	27	22
DC	46	10	10	0	36	64	49	0	0	0	0	0	0	0	9	0	0	0	9	9	9
DE	232	235	138	227	324	189	277	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FL	2,350	2,871	2,388	2,921	3,677	4,234	4,620	214	210	67	208	65	217	80	86	189	87	384	96	102	187
GA	606	907	927	822	785	903	930	0	6	6	0	0	0	0	59	277	274	225	6	179	179
HI	90	60	60	50	88	102	51	0	10	10	0	0	0	0	6	10	16	6	88	6	0
IA	784	875	877	1,025	1,107	1,245	1,405	0	12	12	0	0	0	0	76	5	5	39	66	67	63
ID	430	428	428	427	412	492	460	0	0	0	0	0	0	0	16	15	16	14	2	0	2
IL	2,932	3,487	3,694	4,078	4,167	5,186	5,852	100	169	159	174	44	44	44	147	169	173	239	90	44	118
IN	2,163	2,688	2,631	2,471	2,765	2,827	3,163	39	49	49	68	58	39	39	31	254	164	163	91	36	14
KS	646	1,387	1,202	1,503	1,456	1,914	1,893	6	6	6	0	0	0	0	2	65	64	61	1	63	4
KY	204	209	137	295	483	260	284	2	12	14	12	14	14	16	11	14	10	98	1	6	24
LA	671	804	960	949	1,234	1,181	1,619	12	98	108	120	36	14	12	0	73	73	72	11	4	15
MA	1,349	1,660	1,506	1,956	2,725	2,724	2,910	15	15	15	0	0	0	0	15	15	48	63	58	0	58
MD	401	608	602	1,016	1,191	743	717	16	155	143	98	125	48	163	20	32	20	1	22	3	120
ME	332	443	405	589	862	843	934	9	9	9	9	9	9	9	13	2	12	3	3	9	8
MI	739	778	649	859	1,263	1,354	1,181	0	0	0	0	0	0	0	51	62	90	25	23	169	59
MN	1,856	2,129	2,329	2,259	2,636	2,706	3,037	25	191	191	18	37	18	18	33	179	185	27	30	30	28
MO	1,804	2,645	2,400	2,793	3,389	3,536	3,462	2	4	4	0	4	16	0	12	43	43	163	30	92	4
MS	0	100	100	181	189	189	137	0	0	0	0	0	0	0	0	0	0	0	2	0	2
MT	292	396	381	408	404	408	607	0	0	0	0	0	32	0	0	1	1	3	0	4	4
NC	798	1,207	1,285	1,295	1,349	1,330	964	10	8	8	8	8	0	0	0	5	5	0	62	124	0
ND	119	142	134	129	67	217	301	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NE	456	709	684	794	822	857	910	0	0	0	0	0	0	0	14	16	5	19	18	19	12
NH	515	553	526	577	669	712	624	0	0	0	0	0	0	0	0	50	50	50	50	0	51
NJ	541	364	443	686	513	658	280	120	0	60	69	60	60	0	6	6	6	126	12	12	3
NM	207	295	310	269	379	382	542	0	0	0	0	0	0	0	1	2	3	0	0	0	0
NV	252	232	232	248	168	256	311	0	0	0	0	0	0	0	1	4	4	2	0	2	0
NY	1,566	2,113	2,055	3,029	2,421	3,235	3,653	449	611	620	1,082	1,088	811	1,027	321	156	134	41	23	44	46
OH	3,081	3,500	2,591	4,105	4,372	4,810	5,121	21	244	244	103	41	23	16	2	40	189	628	256	265	198
OK	635	729	832	917	1,129	902	1,007	13	29	0	29	0	0	0	4	9	11	11	243	2	142
OR	761	835	864	698	848	893	829	0	0	0	0	0	0	0	5	4	5	80	78	72	77
PA	2,791	3,634	3,372	4,267	5,280	5,353	5,375	25	45	29	4	34	34	16	45	25	64	32	270	230	234
RI	246	468	508	573	420	559	607	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SC	60	175	333	377	745	746	482	0	0	0	0	0	0	0	0	8	8	0	0	0	0
SD	169	215	226	191	216	231	245	0	0	0	0	0	0	0	1	0	1	2	0	1	11
TN	259	300	256	378	340	359	412	0	7	7	16	0	0	0	0	4	4	10	0	0	1
TX	2,210	2,795	2,872	3,056	2,863	2,928	3,044	24	51	51	12	0	25	0	48	35	237	230	42	8	11
UT	431	487	445	499	591	826	614	6	6	6	0	0	0	0	0	0	0	3	8	9	57
VA	1,027	753	724	885	828	739	1,103	40	12	12	29	27	17	5	0	0	0	5	1	10	12
VT	147	154	163	116	137	87	153	0	0	0	0	0	0	0	0	0	0	0	0	4	0
WA	1,643	1,879	1,721	1,804	1,928	2,013	2,095	76	100	30	77	75	75	75	177	198	48	209	241	212	318
WI	2,387	2,195	2,255	2,724	2,847	2,980	3,328	12	52	52	2	2	2	11	236	347	371	300	238	146	208
WV	102	143	53	0	0	10	173	0	0	0	0	0	36	36	0	0	0	0	0	0	0
WY	319	237	299	276	332	303	275	0	0	0	0	0	0	0	1	0	0	1	1	3	1
US	46,752	56,512	53,810	61,460	67,960	72,529	76,538	1,360	2,793	2,547	2,815	2,141	1,799	2,002	2,074	3,364	3,512	4,085	2,843	2,774	3,121

Special Care Beds (continued)

Table 10 shows that there were 18,256 rehabilitation beds in special units in certified nursing facilities in the U.S. in 1999. This was only one percent of the certified nursing facility beds in the U.S. There were also only 4,726 ventilator beds reported in special units in 1999. There were 568 dialysis unit beds surveyed in 1999.

Overall, these data suggest that dedicated special care units in certified nursing facilities are only a small percent of the total beds.

It should be noted that many nursing facilities accept residents with Alzheimer's and other special problems but do not maintain separate units for such residents.

TABLE 10
TOTAL NUMBER OF SPECIAL CARE BEDS IN CERTIFIED NURSING FACILITIES IN THE U.S.

State	Rehabilitation							Ventilator							Dialysis						
	1993	1994	1995	1996	1997	1998	1999	1993	1994	1995	1996	1997	1998	1999	1993	1994	1995	1996	1997	1998	1999
AK	16	16	16	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AL	29	309	176	384	301	265	363	43	37	37	17	62	46	87	0	0	0	0	0	0	0
AR	0	178	192	70	82	82	170	18	6	12	7	18	46	23	0	0	0	0	0	14	0
AZ	75	96	100	188	184	236	194	30	64	38	87	93	165	0	0	64	60	75	0	60	0
CA	2,787	3,461	3,062	3,470	2,409	2,331	2,337	849	1,195	1,155	1,236	976	1,156	1,134	3	77	99	52	14	19	272
CO	319	239	236	203	213	215	365	10	70	73	54	56	13	1	0	7	7	4	22	5	14
CT	774	1,166	1,031	1,236	1,517	1,455	1,064	81	136	136	130	133	43	66	2	20	0	4	4	4	0
DC	78	66	0	0	0	33	0	0	0	0	0	0	14	14	0	0	0	0	0	0	0
DE	148	59	59	59	59	59	0	9	60	56	30	34	8	35	8	0	0	0	0	0	0
FL	641	1,189	1,073	1,101	1,218	1,101	1,940	314	450	497	496	361	465	269	4	0	0	69	17	44	18
GA	110	321	275	197	163	263	265	8	8	8	32	32	39	10	0	0	0	0	0	2	2
HI	0	10	10	0	22	0	0	0	10	10	0	0	0	0	0	10	10	0	0	0	0
IA	34	40	57	133	135	112	148	0	9	9	57	31	0	8	0	0	0	10	4	1	0
ID	34	112	147	89	135	119	126	0	4	8	4	12	4	4	0	0	0	0	0	0	0
IL	1,334	1,937	1,921	1,408	1,588	1,584	1,775	148	353	343	334	402	366	352	14	23	33	2	33	13	12
IN	413	515	424	766	628	567	401	342	175	398	140	126	71	38	0	0	0	19	19	0	1
KS	126	329	215	160	147	125	122	6	5	5	14	8	0	0	0	2	2	0	0	0	0
KY	58	86	91	131	78	109	146	60	230	60	67	97	13	99	0	0	0	0	0	0	0
LA	59	103	139	278	299	249	77	24	83	83	102	114	94	66	22	1	33	0	0	2	6
MA	655	1,017	1,070	962	637	515	437	187	235	121	190	171	118	76	0	0	0	2	0	2	0
MD	76	240	361	454	362	93	247	51	50	41	76	150	99	79	10	512	11	10	34	6	0
ME	34	15	15	143	174	197	244	0	3	3	0	25	0	1	9	9	9	9	9	9	9
MI	190	221	144	237	253	337	398	136	94	101	71	110	100	80	1	0	0	0	1	1	0
MN	269	495	632	748	872	958	1,010	16	57	56	47	47	43	48	0	148	148	0	0	12	12
MO	86	174	184	168	152	185	124	46	34	34	42	47	32	20	1	5	5	50	0	1	0
MS	0	33	43	49	98	187	268	0	0	0	0	0	8	0	0	0	0	0	0	0	6
MT	30	46	46	14	35	26	40	0	0	0	0	0	8	0	0	0	0	0	0	8	0
NC	297	388	328	216	312	137	0	103	146	152	164	154	166	144	10	0	0	0	0	0	0
ND	0	29	29	0	0	0	0	0	0	0	0	0	8	8	0	0	0	0	0	0	0
NE	160	136	136	182	162	176	206	106	55	55	59	63	62	76	6	0	0	0	2	0	0
NH	142	86	62	118	90	72	100	50	62	62	72	62	0	12	0	50	50	50	50	0	5
NJ	190	142	142	223	350	388	95	109	127	107	106	148	201	131	0	0	0	9	0	0	3
NM	0	29	29	0	0	16	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0
NV	0	0	0	0	47	37	61	0	13	12	1	144	26	46	0	0	0	0	0	0	2
NY	450	258	505	883	914	1,557	1,183	152	152	113	196	403	400	506	4	10	10	20	3	9	4
OH	424	518	367	723	986	884	1,035	287	474	457	706	803	593	512	1	1	3	0	27	0	0
OK	49	114	129	99	247	165	316	19	42	46	25	23	14	9	6	3	3	1	8	8	14
OR	179	139	118	121	97	104	209	4	1	1	10	16	0	1	0	4	4	2	4	0	1
PA	715	923	846	1,060	831	923	795	231	263	237	240	289	510	434	12	1	1	5	3	3	15
RI	138	64	64	114	76	164	227	14	22	0	0	0	25	10	0	0	0	0	0	2	0
SC	0	71	148	216	120	151	0	0	0	0	0	8	4	12	0	0	0	0	0	3	0
SD	0	48	48	79	61	50	61	0	24	24	36	36	36	36	0	0	0	0	0	0	0
TN	254	159	109	183	62	175	165	12	73	85	77	3	56	15	0	1	1	9	0	1	0
TX	247	278	299	233	336	145	150	44	161	141	164	159	93	56	10	18	18	4	0	4	0
UT	156	180	214	139	114	100	115	20	6	12	12	0	5	0	6	0	0	10	0	0	0
VA	265	351	363	394	322	222	307	124	131	108	142	134	80	57	0	0	0	0	0	0	0
VT	32	60	120	60	80	112	112	1	0	0	0	0	0	0	0	0	0	0	0	0	0
WA	169	139	133	187	365	198	268	94	107	172	85	66	64	58	10	0	13	6	1	4	126
WI	618	1,030	990	842	822	785	522	56	103	103	95	76	72	53	0	2	2	4	10	10	10
WV	0	32	20	0	0	36	68	2	34	0	0	0	40	40	0	0	0	0	0	36	36
WY	24	0	0	19	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
US	12,884	17,647	16,918	18,754	18,184	18,000	18,256	3,806	5,365	5,172	5,423	5,692	5,406	4,726	139	968	522	426	265	283	568

Resident Groups/ Family Groups

Facilities may have an organized group of residents which meet regularly to discuss and offer suggestions about policies and procedures affecting residents' care, treatment, and quality of life; to support each other; to plan resident and family activities; to participate in educational activities or for any other purposes. Table 11 shows that the percent of facilities with resident groups was about 92-94 percent over the 1993-1999 period.

Facilities may have organized groups of family members which meet regularly to discuss issues about residents' care, treatment, and quality of life. Table 11 shows that approximately 46.9 percent of facilities reported family groups in 1993, but this decreased slightly to 45.9 percent in 1999.

Percent of Certified Nursing Facilities with Resident and Family Groups

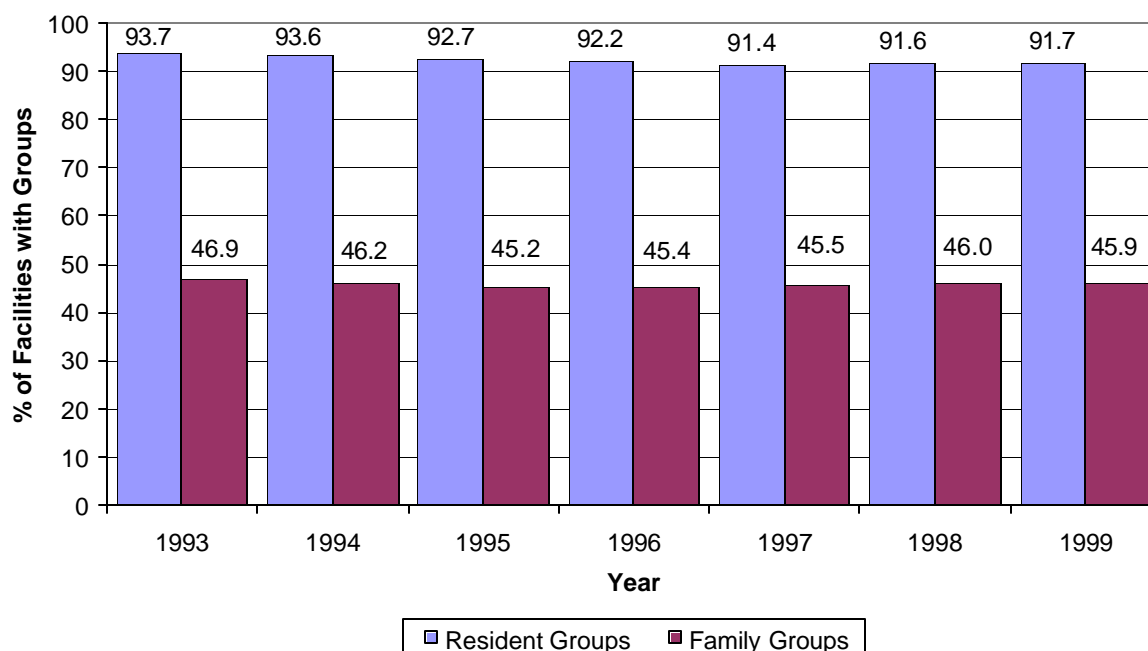


TABLE 11
PERCENT CERTIFIED NURSING FACILITIES WITH RESIDENT GROUPS AND FAMILY GROUPS

State	Resident Groups							Family Groups						
	1993	1994	1995	1996	1997	1998	1999	1993	1994	1995	1996	1997	1998	1999
AK	83.3	71.4	69.2	31.3	0.0	7.1	42.9	41.7	42.9	46.2	6.3	0.0	7.1	7.1
AL	95.9	96.6	96.5	96.2	96.4	97.7	95.5	75.8	68.5	69.7	65.9	67.9	66.2	67.2
AR	90.8	91.3	89.6	89.5	88.2	89.4	88.0	53.1	54.1	54.2	53.1	49.8	47.5	51.6
AZ	94.9	89.6	85.7	88.0	83.1	85.3	90.8	57.6	49.6	49.1	50.0	44.9	43.4	44.8
CA	94.7	93.7	92.3	91.8	91.3	91.3	90.9	56.9	53.4	53.0	53.3	49.7	48.2	48.4
CO	92.5	92.9	92.1	92.6	91.3	92.5	93.2	61.0	58.9	56.2	57.4	58.2	59.4	58.9
CT	96.7	98.4	97.6	98.2	98.4	99.1	97.5	42.8	50.6	49.4	53.1	58.5	62.7	61.8
DC	100.0	94.4	92.3	88.9	81.8	78.6	92.9	73.3	72.2	76.9	77.8	68.2	78.6	85.7
DE	97.3	97.7	93.9	91.9	90.5	92.6	97.1	48.6	51.2	45.5	43.2	50.0	59.3	55.9
FL	96.7	96.1	93.8	93.2	92.3	91.5	92.4	75.9	77.6	75.7	75.6	72.7	74.2	73.8
GA	95.3	97.0	96.6	94.9	95.0	94.3	95.3	52.2	56.2	55.0	51.6	52.8	50.6	51.9
HI	72.0	96.2	85.7	82.5	90.5	84.1	76.9	28.0	53.8	50.0	45.0	57.1	43.2	46.2
IA	84.6	84.5	85.2	82.5	78.6	85.9	88.8	25.5	25.5	25.5	21.2	22.9	20.8	22.1
ID	90.8	89.7	87.5	86.5	84.4	84.8	87.2	47.7	33.3	32.5	35.1	39.0	36.7	35.9
IL	97.0	96.5	96.2	96.1	96.7	95.4	95.5	42.4	38.5	39.5	37.6	39.3	41.4	42.0
IN	92.8	94.0	94.1	92.0	92.3	89.8	89.7	47.8	37.1	36.7	34.9	33.0	32.6	30.8
KS	89.0	89.8	89.7	88.7	88.6	89.5	90.9	38.1	37.1	34.1	37.0	35.6	42.0	38.1
KY	95.4	93.8	89.7	92.9	90.4	90.8	91.1	46.7	45.9	39.7	45.0	45.8	46.4	44.7
LA	84.4	83.6	84.1	82.7	84.3	82.0	81.8	24.7	27.9	28.4	25.5	27.9	27.4	26.8
MA	98.1	97.6	96.1	95.0	95.7	95.0	95.0	39.9	38.5	37.4	40.2	42.2	48.0	46.9
MD	94.2	93.0	90.9	90.3	86.5	86.5	84.3	50.3	54.0	53.2	50.2	47.4	42.1	42.5
ME	96.8	96.9	96.5	98.4	96.0	94.1	92.1	24.8	27.5	27.8	28.0	32.8	35.6	33.3
MI	97.6	99.5	99.5	99.5	99.3	98.2	99.0	45.5	50.5	51.9	57.2	60.8	57.4	53.7
MN	98.8	98.6	98.9	98.3	97.9	97.3	99.0	71.7	70.1	69.7	71.2	67.8	67.3	63.9
MO	85.4	89.7	87.9	86.2	86.9	85.8	86.8	31.1	33.7	30.8	35.7	39.8	39.4	37.8
MS	96.3	92.6	88.4	87.4	89.6	89.0	90.7	54.3	56.8	52.8	50.0	54.7	48.5	50.0
MT	92.6	94.8	93.0	92.5	88.4	90.2	89.7	44.2	40.6	35.0	38.7	35.8	33.7	32.0
NC	94.3	94.6	94.3	93.2	95.0	95.1	93.8	49.7	48.2	46.9	46.7	53.0	52.2	49.9
ND	97.5	98.8	98.8	97.7	96.0	98.9	95.4	23.8	25.9	25.3	25.3	29.3	29.5	28.7
NE	92.7	94.6	92.9	95.6	93.1	93.9	92.2	37.9	33.5	35.8	35.8	33.0	31.3	27.0
NH	93.9	94.0	95.8	97.1	94.7	93.3	90.9	22.7	34.3	37.5	32.9	46.7	45.3	40.9
NJ	97.3	98.3	98.3	98.3	97.3	95.8	94.7	50.6	49.3	48.5	51.5	49.7	53.6	51.9
NM	92.8	83.1	81.8	83.5	82.5	86.4	88.3	52.2	45.5	49.4	54.4	54.0	54.5	49.4
NV	80.6	80.0	86.1	71.8	60.5	82.9	85.0	45.2	45.0	44.4	30.8	23.7	36.6	47.5
NY	99.0	99.7	97.6	98.2	99.1	99.6	98.3	62.6	64.4	61.6	60.2	58.5	65.0	65.5
OH	96.1	95.4	95.8	95.2	93.7	94.3	93.6	29.3	30.3	30.0	32.1	33.3	31.9	37.5
OK	92.4	91.5	92.7	91.0	89.3	88.9	91.8	26.9	25.8	27.2	26.4	27.4	24.9	24.1
OR	95.5	94.7	94.0	93.5	93.4	94.8	93.7	43.6	45.3	48.7	44.8	44.7	48.4	49.3
PA	92.7	94.2	93.3	91.1	90.8	90.4	91.2	42.0	41.5	39.4	39.2	40.4	41.9	44.4
RI	98.7	94.6	93.9	90.7	92.4	95.5	91.3	26.0	31.5	32.9	29.1	25.0	30.3	29.3
SC	94.8	95.5	94.2	90.9	90.9	91.4	87.1	59.3	56.0	56.5	57.0	55.4	55.8	50.3
SD	97.2	97.2	97.3	98.0	96.0	97.7	98.8	45.4	50.0	52.3	58.0	52.5	47.7	40.0
TN	91.3	90.9	90.3	89.5	87.7	88.3	88.8	57.8	56.4	56.3	59.3	54.8	55.9	57.3
TX	87.0	85.7	84.6	85.7	83.7	84.2	84.2	46.5	44.6	42.9	43.7	43.1	43.9	45.1
UT	94.3	88.9	85.5	96.2	89.0	85.4	85.1	56.8	53.3	46.1	45.6	37.4	38.2	43.2
VA	91.4	93.2	93.3	92.9	94.1	93.5	93.1	45.5	42.2	40.8	43.7	47.3	49.4	45.4
VT	87.8	94.4	95.0	94.6	100.0	94.1	90.5	34.1	33.3	25.0	24.3	32.4	35.3	33.3
WA	97.3	96.7	96.3	94.8	91.7	96.3	95.1	63.5	57.6	56.9	54.3	53.3	51.3	47.9
WI	97.5	96.6	97.0	96.1	95.0	96.7	96.5	40.9	43.0	44.5	43.4	43.9	43.1	41.1
WV	92.5	92.2	89.6	88.2	84.6	84.1	88.8	56.3	48.4	49.3	50.9	43.6	39.1	38.1
WY	89.3	91.2	92.1	91.9	88.9	87.5	86.1	32.1	50.0	50.0	29.7	30.6	25.0	30.6
US	93.7	93.6	92.7	92.2	91.4	91.6	91.7	46.9	46.2	45.2	45.4	45.5	46.0	45.9

RESIDENT CHARACTERISTICS

Background

Nursing facilities vary in the type of residents they serve. Resident characteristics affect the environment of the facility. Moreover, the special characteristics of nursing facility residents require different levels and types of staff resources and affect the facility's success in providing high quality care. A number of nursing facility resident classification systems have been developed and are often referred to as "case mix" indicators.

The resource utilization group system (RUGS-II) is the most well established case mix approach tested for reliability and validity (Fries and Cooney, 1985; Schneider et al., 1988; Fries et al., 1989). RUGS II was developed from a study of Medicaid nursing home residents in New York and consists of 16 groups which are first divided into five categories: special care, rehabilitation, clinically complex, severe behavioral problems, and reduced physical functioning. Subgroups are formed under each of these categories by degree of dependency in activities of daily living (ADL). RUGS III is the latest version developed for the current HCFA Nursing Home Case Mix demonstration project (Fries et al. 1994).

The OSCAR report has summary data on residents at the facility level describing resident's need for assistance with activities of daily living (ADL). Although interesting, such data are

difficult to understand unless they are summarized in some way. Two types of summary data are presented.

First, a simple summary of three major activities of daily living (ADLs) was compiled. The facilities were asked to rate each resident's ADLs on a scale of 1 to 3 from needs little or no assistance to needs extensive assistance. The three ADL scores were for those residents who needed assistance in: (1) eating, (2) toileting, and (3) transferring. A score of 1 was assigned to residents who were independent. A score of 2 was assigned to those that needed some supervision. A score of 3 was assigned to those who were dependent.

Each ADL score was multiplied by the number of residents in that category for each facility. An average composite score was developed by adding each of the three scores together and dividing by the total number of residents in the facility to compute each facility's index score. Thus, a summary case mix score ranging from 3-9 was compiled for each facility based on resident ADL characteristics. Individual facility scores were then summarized for each state. Because of reporting changes by HCFA, data for the earlier years could not be computed for this report.

The second approach used was based upon a composite case mix index for nursing facilities. This approach was developed by Thoms (1975) and used by

Dor (1989), Cohen and Dubay (1990), and by Cowles (Health Data Associates 1994). This approach constructed a casemix score by multiplying the proportion of residents with selected ADL limitations and selected patient problems times the estimated number of management minutes required for care of those selected problems, developed from a study of service requirements by Thoms (1975). Thus, a weighted score is multiplied by the percentage of residents in various categories as follows: completely bedfast times 46; needing assistance with ambulation times 32; needing full eating assistance times 45; needing some eating assistance times 20; having an indwelling catheter times 20; incontinent times 48; having decubitus ulcers times 20; receiving

bowel or bladder retraining times 26; and receiving special skin care times 10. Thus, an index was constructed for each facility and then summarized to develop an average resident acuity at the state level.

In addition, the following characteristics show the type of more advanced care that residents receive: percent of clients receiving special treatments (injections, ostomy care, IV feedings, tube feedings, or suctioning), and percentage with organic psychiatric or other psychiatric conditions. Other characteristics that may be important are the percentage who receive psychotropic drugs and who have decubitus ulcers, contractures, incontinence, and catheters.

FINDINGS

RESIDENT CHARACTERISTICS AND SERVICES PROVIDED

Assistance with Activities of Daily Living

Table 12 shows the average score for residents' needing assistance with eating in facilities by state. Each state has an average score from 1 to 3 in terms of the need for assistance with eating, where 1 indicates the lowest need and 3 the greatest need for assistance. The U.S. average resident need for eating assistance was 1.6 to 1.7 for all facilities in the 1995-1999 period.

The average score for residents' needing assistance in toileting is shown in Table 12. The U.S. average resident need for toileting assistance was 2.1 for all facilities in the 1995-1999 period.

Finally, the need for resident assistance with transferring from surfaces such as to and from the bed, chair, wheelchair or to and from a standing position is shown in Table 12. The average resident need was 2.0 for transferring in the 1995-1999 period.

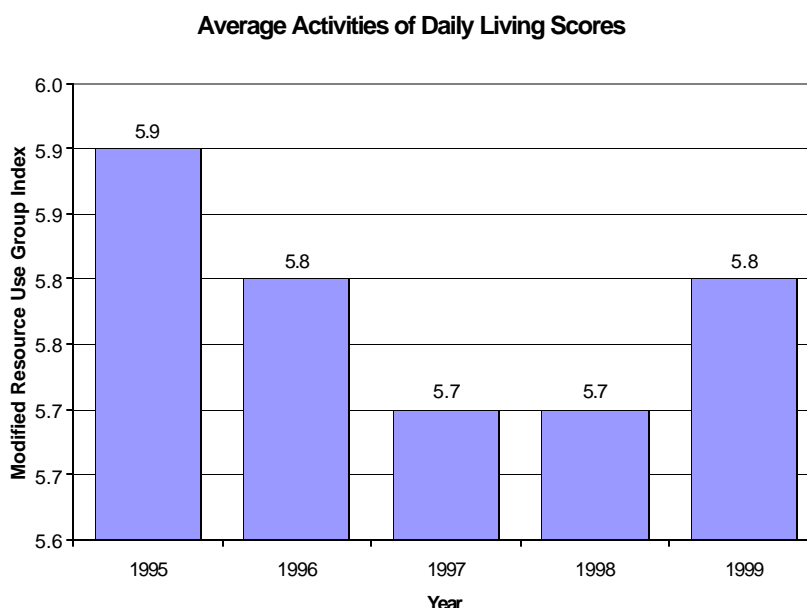


Table 12 also shows the average summary scores for these three activities of daily living for all facilities in each state. The average resident need score for eating, toileting, and transferring for all facilities in the U.S. was 5.9 in 1995 and 5.8 in 1999. This approach of summary scores on a three point scale shows little variation across states.

TABLE 12
AVERAGE FACILITY SCORES FOR ACTIVITIES OF DAILY LIVING

State	Eating*					Toileting*					Transferring*					Modified Resource Use Group Index**				
	1995	1996	1997	1998	1999	1995	1996	1997	1998	1999	1995	1996	1997	1998	1999	1995	1996	1997	1998	1999
AK	1.7	1.6	1.5	1.5	1.6	2.0	2.1	2.0	2.0	2.1	1.8	2.0	1.8	2.0	2.0	5.5	5.7	5.4	5.6	5.7
AL	1.9	1.7	1.8	1.8	1.8	2.2	2.1	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	6.2	6.0	6.0	6.0	6.0
AR	1.8	1.7	1.7	1.7	1.7	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	5.9	5.7	5.8	5.8	5.7
AZ	1.7	1.6	1.6	1.6	1.5	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	5.9	5.7	5.6	5.6	5.6
CA	1.8	1.7	1.7	1.7	1.7	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	6.2	6.1	6.1	6.0	6.1
CO	1.6	1.5	1.5	1.5	1.5	2.0	2.0	2.0	2.0	2.0	1.9	1.8	1.8	1.8	1.8	5.6	5.3	5.3	5.3	5.3
CT	1.6	1.6	1.6	1.6	1.6	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	5.6	5.5	5.5	5.5	5.6
DC	1.9	1.8	1.8	1.8	1.8	2.2	2.2	2.2	2.3	2.4	2.1	2.1	2.1	2.1	2.2	6.1	6.1	6.1	6.2	6.3
DE	1.7	1.7	1.6	1.6	1.7	2.1	2.1	2.2	2.1	2.2	2.0	2.0	2.0	2.0	2.0	5.9	5.8	5.8	5.7	5.8
FL	1.7	1.7	1.6	1.6	1.7	2.2	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	6.0	5.8	5.8	5.8	5.9
GA	1.8	1.7	1.7	1.7	1.7	2.2	2.1	2.2	2.2	2.2	2.1	2.0	2.0	2.0	2.0	6.0	5.9	5.9	5.9	5.9
HI	1.9	1.9	1.8	1.8	1.9	2.4	2.3	2.3	2.3	2.3	2.3	2.3	2.2	2.2	2.2	6.6	6.4	6.4	6.3	6.4
IA	1.6	1.5	1.5	1.4	1.5	2.0	1.9	1.9	1.9	2.0	1.9	1.8	1.8	1.8	1.8	5.5	5.3	5.2	5.2	5.3
ID	1.6	1.5	1.5	1.6	1.6	2.1	2.0	2.0	2.1	2.1	1.9	1.9	1.9	1.9	1.9	5.6	5.5	5.4	5.6	5.6
IL	1.6	1.5	1.5	1.5	1.5	2.0	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	5.4	5.2	5.2	5.2	5.2
IN	1.7	1.6	1.6	1.6	1.6	2.1	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	5.7	5.5	5.5	5.5	5.6
KS	1.6	1.5	1.5	1.5	1.5	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	5.5	5.3	5.3	5.3	5.4
KY	2.1	1.9	1.9	1.9	1.9	2.4	2.3	2.3	2.3	2.3	2.3	2.2	2.2	2.2	2.2	6.7	6.5	6.4	6.4	6.5
LA	1.7	1.7	1.6	1.6	1.6	2.0	2.0	2.0	2.0	2.1	2.0	2.0	1.9	2.0	2.0	5.8	5.7	5.6	5.6	5.7
MA	1.7	1.6	1.6	1.6	1.7	2.1	2.1	2.1	2.1	2.1	2.0	1.9	2.0	2.0	2.0	5.8	5.6	5.7	5.7	5.8
MD	1.8	1.8	1.8	1.8	1.8	2.3	2.3	2.3	2.2	2.3	2.2	2.1	2.2	2.1	2.2	6.3	6.2	6.2	6.1	6.2
ME	1.8	1.7	1.7	1.7	1.7	2.3	2.3	2.3	2.3	2.3	2.1	2.1	2.2	2.2	2.2	6.1	6.1	6.1	6.1	6.1
MI	1.7	1.6	1.6	1.6	1.6	2.2	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	5.9	5.7	5.7	5.7	5.7
MN	1.7	1.5	1.6	1.6	1.6	2.1	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	5.6	5.4	5.5	5.4	5.4
MO	1.7	1.6	1.6	1.6	1.6	2.1	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	5.8	5.5	5.5	5.6	5.5
MS	1.7	1.7	1.6	1.6	1.7	2.1	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0	5.8	5.7	5.7	5.7	5.7
MT	1.5	1.5	1.5	1.5	1.5	2.0	1.9	1.9	2.0	2.0	1.8	1.8	1.8	1.8	1.8	5.3	5.2	5.2	5.3	5.3
NC	1.8	1.8	1.8	1.8	1.8	2.3	2.3	2.3	2.3	2.3	2.2	2.1	2.1	2.1	2.1	6.3	6.2	6.1	6.2	6.2
ND	1.6	1.5	1.5	1.5	1.5	2.1	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	5.6	5.4	5.4	5.4	5.4
NE	1.6	1.5	1.5	1.5	1.5	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	5.5	5.3	5.3	5.4	5.4
NH	1.6	1.5	1.5	1.6	1.5	2.0	2.0	2.0	2.0	2.0	1.9	1.8	1.9	1.9	1.9	5.5	5.3	5.4	5.4	5.4
NJ	1.7	1.6	1.6	1.6	1.7	2.2	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	5.9	5.8	5.8	5.7	5.8
NM	1.7	1.6	1.5	1.5	1.6	2.1	2.1	2.0	2.1	2.0	2.0	2.0	1.9	1.9	1.9	5.8	5.6	5.5	5.5	5.5
NV	1.8	1.6	1.5	1.6	1.6	2.2	2.1	2.0	2.1	2.1	2.1	2.0	1.9	2.0	2.0	6.0	5.7	5.5	5.7	5.7
NY	1.9	1.8	1.8	1.8	1.8	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.0	2.1	6.2	6.0	6.0	6.0	6.0
OH	1.8	1.7	1.6	1.7	1.7	2.2	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	6.1	5.8	5.8	5.8	5.8
OK	1.7	1.6	1.6	1.7	1.6	2.1	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	5.8	5.6	5.6	5.6	5.6
OR	1.8	1.7	1.6	1.7	1.7	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.0	2.0	2.0	6.1	5.9	5.8	5.9	5.9
PA	1.7	1.7	1.7	1.7	1.7	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	6.1	6.0	5.9	5.9	6.0
RI	1.7	1.6	1.6	1.6	1.6	2.1	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	5.7	5.5	5.5	5.4	5.4
SC	1.9	1.8	1.8	1.8	1.8	2.4	2.3	2.3	2.4	2.3	2.2	2.2	2.2	2.2	2.2	6.5	6.4	6.3	6.3	6.3
SD	1.6	1.5	1.5	1.5	1.5	1.9	1.9	2.0	2.0	2.0	1.9	1.8	1.8	1.8	1.9	5.4	5.2	5.3	5.3	5.3
TN	1.9	1.8	1.8	1.8	1.8	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	6.3	6.1	6.1	6.1	6.1
TX	1.8	1.7	1.6	1.6	1.6	2.2	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	6.0	5.8	5.7	5.7	5.8
UT	1.5	1.5	1.5	1.5	1.5	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.8	1.9	5.4	5.3	5.4	5.3	5.4
VA	2.0	1.9	2.0	2.0	2.0	2.4	2.3	2.4	2.4	2.4	2.3	2.2	2.2	2.2	2.2	6.7	6.5	6.6	6.6	6.6
VT	1.7	1.6	1.6	1.6	1.6	2.1	2.1	2.1	2.1	2.2	1.9	2.0	2.0	2.0	2.0	5.7	5.7	5.8	5.7	5.8
WA	1.7	1.7	1.6	1.7	1.7	2.2	2.2	2.1	2.2	2.2	2.0	2.0	2.0	2.0	2.0	5.9	5.8	5.8	5.9	5.9
WI	1.6	1.5	1.5	1.5	1.5	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	5.5	5.4	5.4	5.3	5.4
WV	2.0	2.0	1.8	1.8	1.8	2.4	2.4	2.2	2.2	2.2	2.3	2.3	2.1	2.1	2.1	6.6	6.7	6.1	6.0	6.1
WY	1.6	1.5	1.5	1.5	1.5	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	5.4	5.3	5.1	5.2	5.3
US	1.7	1.7	1.6	1.6	1.7	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	5.9	5.8	5.7	5.7	5.8

* Scale is 1-3 with a score of 3 needing the most assistance.

**Average resident dependence summary score for eating, toileting, and transferring.

Summary Resident Acuity Index

Table 13 shows the average summary score for resident acuity using the management minute approach. This index is based on a compilation of resident characteristics including being bedfast, needing assistance with ambulation, needing full eating assistance, needing some eating assistance, having an indwelling catheter, being incontinent, having a pressure ulcer, receiving bowel or bladder retraining, and receiving special skin care. Each of these characteristics were weighted by the average amount of management minutes or the time needed to provide nursing care.

The average index was 99.6 in 1993 and 100.6 in 1999 for the U.S. This index allows for comparisons of acuity differences in facilities across states, which ranged from 69.8 in Iowa to 123.6 in Virginia in 1999. This shows a wide variation in levels across states.

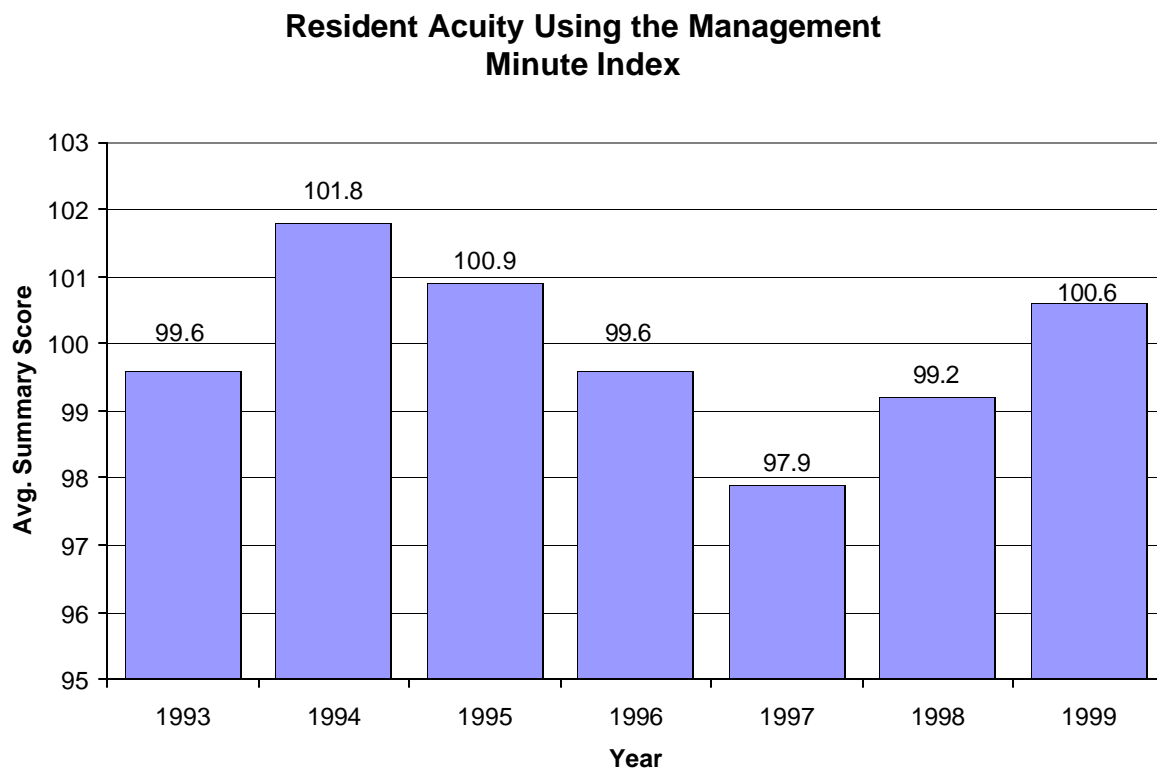


TABLE 13
AVERAGE SUMMARY SCORE FOR RESIDENT ACUITY
USING THE MANAGEMENT MINUTE INDEX

State	1993	1994	1995	1996	1997	1998	1999
AK	106.3	106.8	107.5	90.5	92.2	94.0	111.1
AL	107.0	108.6	106.3	103.9	103.2	104.2	104.9
AR	96.3	99.2	98.4	95.4	95.9	97.2	101.6
AZ	94.7	98.6	97.6	95.2	96.3	96.2	98.4
CA	108.7	109.1	110.2	109.1	107.4	109.0	110.5
CO	85.3	82.9	86.1	87.1	88.6	85.4	91.5
CT	93.4	95.2	94.1	92.9	89.2	89.9	93.3
DC	108.6	108.2	110.2	103.6	106.4	115.0	112.8
DE	97.6	95.9	93.3	97.5	99.1	105.1	99.0
FL	99.7	100.3	97.4	97.2	96.4	98.0	101.0
GA	103.3	102.7	105.2	101.2	101.9	103.6	107.1
HI	119.3	128.2	134.2	127.1	116.4	114.7	115.4
IA	75.0	76.1	73.1	69.7	69.7	68.9	69.8
ID	91.8	93.2	84.2	93.9	84.2	93.2	91.2
IL	89.3	90.3	86.5	83.3	80.2	81.1	82.8
IN	91.9	93.4	93.6	91.1	91.7	91.3	89.8
KS	84.7	87.5	85.3	82.9	83.5	82.8	84.6
KY	114.0	117.4	113.7	112.4	108.6	111.1	112.7
LA	81.8	86.8	88.5	91.4	91.6	94.8	94.9
MA	97.0	99.2	98.6	96.5	91.0	92.5	93.5
MD	109.1	112.8	110.7	111.3	109.4	113.1	115.6
ME	99.2	101.7	105.3	113.2	108.8	115.0	119.5
MI	102.2	101.0	101.1	100.0	96.8	98.6	100.1
MN	98.1	98.0	97.2	92.7	91.8	91.0	94.6
MO	94.7	93.3	90.2	86.6	85.7	89.4	89.7
MS	108.3	110.5	109.5	104.7	97.9	98.9	107.1
MT	87.6	82.7	86.8	80.1	82.7	85.8	85.9
NC	112.4	112.8	112.0	111.4	110.4	112.5	110.9
ND	82.3	80.7	80.5	84.1	83.9	88.2	90.6
NE	81.6	83.0	78.7	72.6	67.9	72.4	75.2
NH	84.1	82.5	83.3	82.3	83.2	85.3	85.3
NJ	95.3	94.3	92.6	94.8	92.3	95.1	97.1
NM	86.7	94.3	88.2	92.4	88.5	86.8	86.9
NV	104.9	104.6	106.9	105.4	93.4	106.1	97.8
NY	122.3	124.5	123.2	121.4	120.2	121.4	119.7
OH	101.1	106.2	107.5	106.1	104.4	104.7	103.5
OK	86.3	89.4	90.3	88.9	90.0	91.1	89.5
OR	110.8	104.7	106.5	105.1	103.8	103.6	108.9
PA	108.5	110.5	110.6	107.9	103.9	104.4	106.3
RI	84.4	87.5	89.2	79.5	77.5	76.5	85.3
SC	121.0	121.4	116.4	124.2	119.6	117.6	115.7
SD	90.2	96.3	98.3	96.4	99.4	100.3	101.2
TN	104.3	107.6	107.4	105.8	105.3	106.2	108.5
TX	98.3	103.2	101.8	99.9	99.6	100.4	101.6
UT	80.7	81.4	87.2	91.0	89.0	87.5	90.0
VA	121.0	123.9	122.7	122.9	122.2	124.2	123.6
VT	93.4	97.8	96.2	98.4	97.2	91.1	105.2
WA	92.0	90.9	101.1	105.9	106.0	109.1	108.1
WI	92.6	96.2	95.3	95.4	92.3	89.3	89.6
WV	106.2	110.5	110.4	102.3	89.5	86.0	95.5
WY	74.6	84.0	81.1	92.8	85.7	79.6	83.0
US	99.6	101.8	100.9	99.6	97.9	99.2	100.6

Residents Who Are Bedfast or Chairbound

Table 14 shows the percent of total residents who were bedfast in the 1993 to 1999 period. This includes residents who were in a bed or recliner for 22 or more hours per day in the week before the survey. The percent of bedfast residents increased from 4.8 in 1993 to 6.9 in 1999. The average percent of bedfast residents ranged from 1.5 in North Dakota to 15.5 percent in Hawaii in 1999.

A number of residents depend on a chair for mobility or are unable to walk without extensive or constant support from others. The percent of total residents who were chairbound averaged from 47.4 to 49.2 percent in the U.S. in 1993-1999 (See Table 14). The percent of chairbound residents ranged from 34.9 percent in Rhode Island to 61.6 percent in Washington in 1999.

% Residents Who Are Bedfast or Chairbound

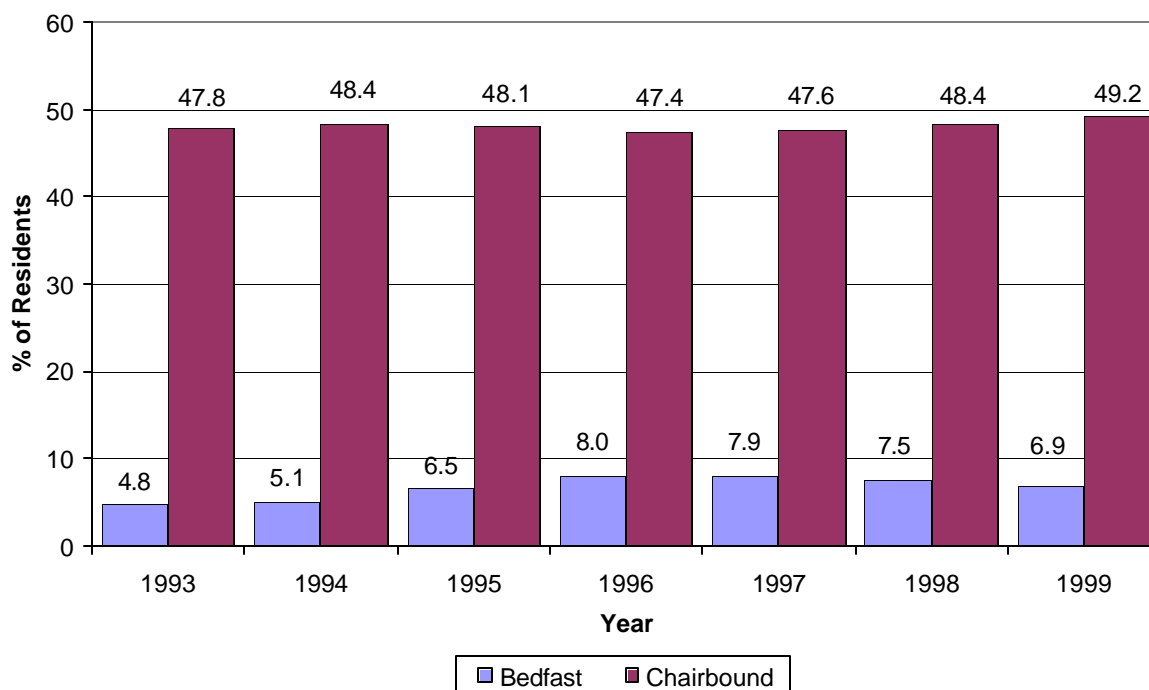


TABLE 14
PERCENTAGE OF RESIDENTS
WHO ARE BEDFAST OR CHAIRBOUND

State	Bedfast							Chairbound						
	1993	1994	1995	1996	1997	1998	1999	1993	1994	1995	1996	1997	1998	1999
AK	4.3	6.7	7.7	10.8	8.5	9.0	10.8	52.5	44.8	43.4	43.4	47.5	50.5	48.6
AL	6.8	7.2	10.3	12.3	13.1	13.5	13.2	48.7	51.3	49.7	47.3	48.0	47.1	49.2
AR	6.3	6.4	7.2	9.6	9.9	9.3	9.4	47.0	47.6	47.8	43.2	43.8	44.6	45.3
AZ	5.3	5.1	5.6	7.6	9.2	8.3	4.8	51.8	48.7	50.5	50.0	48.5	49.2	49.9
CA	5.8	5.6	7.7	9.3	9.7	9.3	8.3	55.6	57.2	54.4	52.0	52.9	52.0	52.5
CO	1.8	1.9	2.8	3.3	4.3	4.0	3.2	40.4	41.6	40.3	41.7	45.9	44.5	48.7
CT	2.0	2.3	3.2	3.6	3.4	3.6	3.1	40.6	39.6	41.5	45.1	44.4	43.7	46.9
DC	3.5	8.0	6.1	9.1	10.3	7.9	11.3	54.5	55.0	49.1	49.6	50.4	56.7	50.0
DE	5.4	3.5	4.8	5.3	9.0	7.6	7.4	40.0	44.5	43.1	47.2	49.2	51.2	51.3
FL	3.3	3.6	4.5	6.5	7.1	7.3	6.3	50.6	50.9	52.2	52.3	52.1	51.6	54.3
GA	5.8	6.1	8.2	10.8	10.1	11.0	9.9	50.9	53.2	54.0	51.5	52.0	51.5	51.3
HI	12.7	12.6	15.1	15.4	16.7	14.8	15.5	62.9	57.2	60.8	52.4	49.5	53.2	51.1
IA	2.4	2.5	3.3	4.5	3.6	3.2	3.0	36.0	34.1	36.8	37.9	40.9	41.0	41.3
ID	3.4	3.0	4.3	4.9	5.3	4.1	3.2	49.5	49.8	45.7	45.5	46.5	47.4	47.9
IL	3.1	3.0	4.1	4.9	4.5	4.3	3.8	42.2	42.7	43.7	41.6	41.5	43.7	43.5
IN	3.9	4.7	5.4	7.6	6.7	6.8	6.1	44.7	44.3	46.8	47.0	49.4	50.2	48.0
KS	3.6	3.5	4.2	5.1	5.1	4.3	3.3	43.9	43.1	41.7	40.8	40.2	43.5	42.7
KY	7.5	6.6	9.4	12.5	13.2	14.0	12.2	50.2	49.6	49.9	49.2	48.1	48.7	49.1
LA	10.2	10.8	12.3	16.2	14.7	15.2	13.8	42.2	43.2	43.8	41.2	41.9	42.0	43.5
MA	2.5	2.3	2.8	3.2	3.2	2.8	2.9	35.7	36.8	36.4	38.8	38.9	41.5	41.4
MD	5.4	5.3	5.7	10.2	9.1	8.4	8.6	49.0	50.9	49.3	47.9	50.4	47.8	51.2
ME	6.4	5.3	6.8	7.1	7.4	7.0	5.5	38.2	40.5	44.5	48.9	46.7	49.5	57.9
MI	2.9	3.3	4.4	5.6	6.1	4.9	5.0	49.7	51.0	50.5	51.0	51.3	53.3	53.1
MN	1.6	1.5	2.4	2.8	2.3	2.4	1.6	45.8	46.7	45.7	43.3	45.0	47.3	49.3
MO	5.3	5.1	5.6	7.3	7.3	6.5	5.6	47.9	47.0	46.0	45.2	46.3	47.8	48.2
MS	8.7	10.9	12.3	13.1	12.7	13.8	11.9	50.2	52.3	51.3	52.6	48.4	45.1	48.7
MT	2.5	2.8	3.6	5.5	4.4	4.9	3.0	45.2	41.7	42.8	39.1	40.0	44.3	42.5
NC	6.0	6.4	8.8	12.7	12.2	13.3	12.1	56.2	56.0	55.2	52.2	53.6	54.1	52.7
ND	2.1	3.5	3.7	3.5	2.6	2.2	1.5	46.9	43.6	42.4	41.7	49.2	51.9	53.6
NE	1.9	2.0	2.9	3.7	3.2	2.8	2.2	40.5	41.5	43.0	38.2	42.5	45.1	45.2
NH	3.1	3.3	3.7	3.8	3.6	3.8	5.8	38.1	36.6	36.5	38.4	38.7	40.0	40.3
NJ	4.1	3.5	5.3	5.1	6.1	5.8	4.9	49.0	49.7	49.2	49.6	49.3	51.5	50.7
NM	3.2	2.8	6.1	9.3	6.6	5.9	5.0	47.3	47.7	48.1	47.6	46.6	50.6	46.0
NV	4.2	3.5	7.2	9.0	9.7	8.7	7.5	45.2	51.6	50.1	42.3	46.9	52.1	54.1
NY	3.4	2.9	4.4	5.3	5.2	5.0	5.0	56.4	56.6	56.6	57.7	56.8	57.4	58.1
OH	4.3	4.9	6.5	7.3	7.1	6.1	6.2	43.2	46.2	46.9	47.7	46.4	46.3	48.9
OK	7.5	7.8	8.7	11.5	11.3	10.6	10.0	42.5	42.6	44.2	42.4	43.9	43.1	41.9
OR	4.5	6.8	8.4	9.3	8.6	8.2	7.8	56.7	52.2	54.1	54.6	52.9	50.8	52.2
PA	4.3	4.5	7.2	7.6	7.7	7.2	6.5	52.9	52.8	51.5	51.0	49.0	49.4	50.3
RI	3.3	2.6	3.7	4.6	3.8	3.9	4.0	33.1	35.7	34.1	32.5	27.7	27.9	34.9
SC	7.1	8.8	8.4	11.4	12.1	12.0	10.0	59.6	57.8	56.7	57.0	57.8	57.9	58.3
SD	1.8	3.4	3.3	3.0	3.3	2.8	2.1	47.2	46.5	47.9	45.4	46.6	47.3	54.2
TN	8.9	9.9	10.7	13.9	13.5	13.5	12.5	49.0	49.4	48.6	46.7	47.2	45.6	46.9
TX	10.1	10.1	12.4	13.4	13.0	12.4	11.2	50.0	50.8	49.3	46.3	46.0	47.4	47.4
UT	3.1	3.2	4.6	5.9	6.4	5.2	5.1	36.5	35.0	39.4	41.8	42.8	42.4	44.5
VA	7.1	6.6	8.3	11.4	10.9	9.1	8.9	58.7	59.6	59.6	57.9	59.2	61.8	60.6
VT	3.7	3.5	3.9	4.0	4.5	4.1	3.5	45.2	37.8	43.4	40.9	37.1	41.4	48.2
WA	3.0	3.5	4.3	6.6	6.8	5.7	6.0	55.8	54.0	47.7	56.9	55.1	58.7	61.6
WI	2.2	2.5	3.1	3.4	3.1	3.0	2.7	47.1	49.4	50.0	46.4	47.7	49.3	51.0
WV	7.1	10.3	9.4	13.9	15.0	13.1	11.8	50.2	44.3	45.5	44.6	42.4	43.2	50.1
WY	3.5	2.3	4.2	4.3	4.1	5.3	5.8	42.8	42.9	43.2	38.5	38.5	39.7	44.5
US	4.8	5.1	6.5	8.0	7.9	7.5	6.9	47.8	48.4	48.1	47.4	47.6	48.4	49.2

Contractures

Contractures, which are restrictions in full range of motion of any joint due to deformity, disuse, and pain, are common problems of nursing facility residents. In 1993, 18.3 percent of residents were reported as having contractures and this increased to 24.0 percent in 1999 (See Table 15). The average percentage reported ranged from 14.9 percent in Nevada facilities to 55.7 percent in New York in 1999.

Physical Restraints

Physical restraints are frequently used by nursing facilities. Restraints include physical or mechanical devices, material or equipment which cannot be easily removed by residents to restrict freedom of movement or normal access to one's own body. In 1993, 20.3 percent of facilities reported using such restraints but this declined to 10.9 percent in 1999 (See Table 15). The reduction may have been related to new regulations and greater training about the negative effects of restraints and the need to reduce the use of restraints.

% Residents with Contractures and Physical Restraints

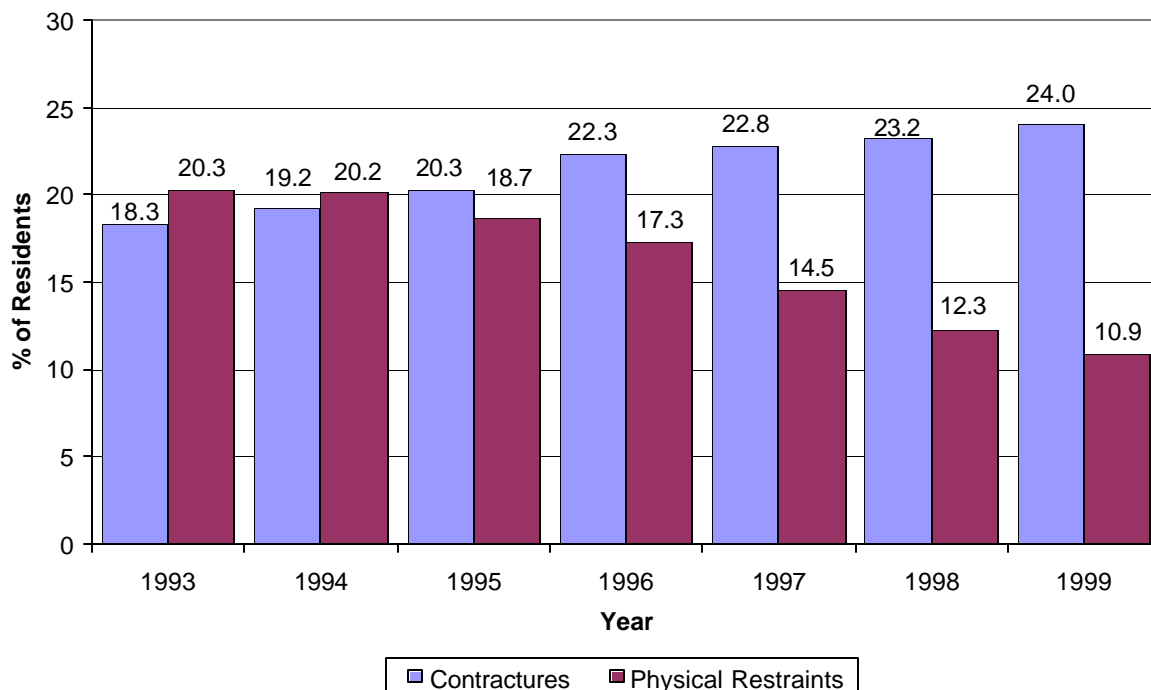


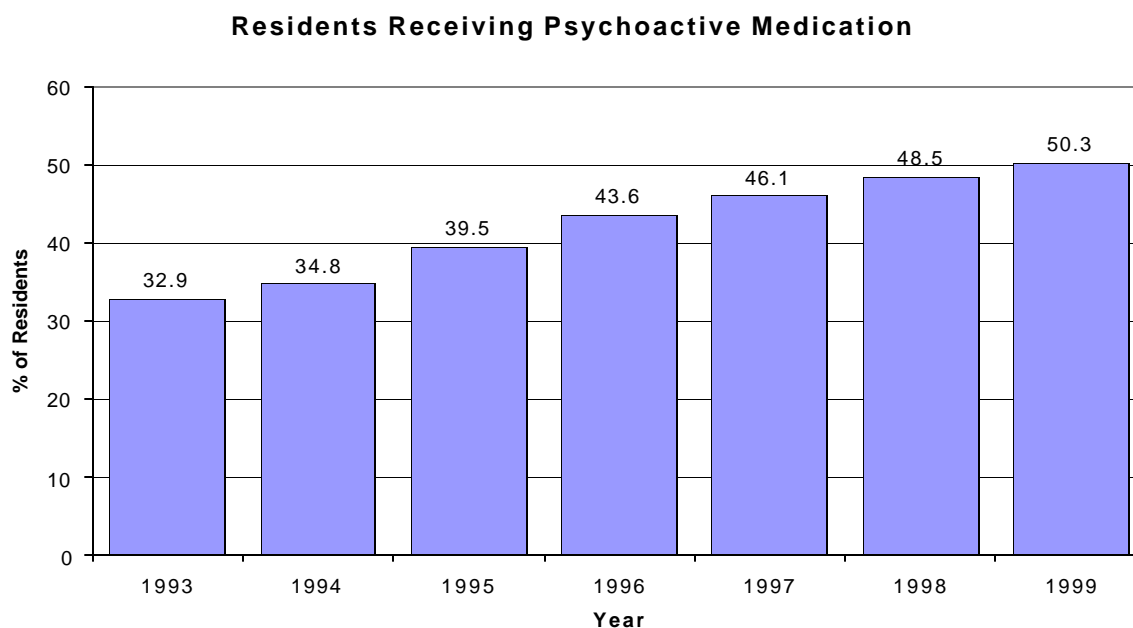
TABLE 15
PERCENT OF RESIDENTS
WITH CONTRACTURES AND PHYSICAL RESTRAINTS

State	Contractures							Physical Restraints						
	1993	1994	1995	1996	1997	1998	1999	1993	1994	1995	1996	1997	1998	1999
AK	21.2	25.2	25.9	27.3	18.0	22.2	30.5	20.1	19.9	17.9	20.2	30.3	15.5	11.3
AL	19.0	19.9	20.8	22.4	23.7	23.5	26.5	22.6	20.8	14.3	9.6	5.7	5.5	5.6
AR	14.5	14.6	14.4	15.9	15.7	18.5	20.6	21.8	21.8	22.4	21.7	23.8	21.2	22.1
AZ	14.4	11.9	13.0	15.0	17.1	17.7	16.8	20.2	20.9	21.2	16.3	16.2	15.2	14.4
CA	16.8	16.8	18.3	21.4	22.2	23.3	24.3	24.5	24.8	25.8	26.2	23.7	20.9	18.6
CO	14.5	14.6	15.8	16.1	16.7	17.0	19.5	20.3	17.4	15.9	18.7	18.7	18.1	15.1
CT	12.1	13.0	13.0	13.5	13.7	14.0	16.4	23.5	23.4	18.8	16.9	14.8	12.2	12.1
DC	18.7	23.0	17.4	22.2	19.7	25.9	24.6	14.2	11.2	11.1	11.7	13.0	17.0	6.9
DE	16.2	16.0	18.4	19.9	20.7	24.7	27.8	16.6	14.7	12.9	18.5	10.2	7.8	4.8
FL	16.5	17.2	17.0	17.4	17.2	17.5	18.3	14.3	14.0	11.4	10.2	8.5	7.3	7.4
GA	18.4	19.3	20.1	21.7	23.7	23.4	24.6	24.8	24.7	17.9	13.0	10.6	9.1	9.5
HI	26.3	25.6	36.6	36.0	34.3	32.0	36.8	25.6	21.2	30.1	20.1	14.2	13.2	10.0
IA	15.5	17.1	18.4	21.4	22.0	21.5	21.5	6.8	6.3	4.6	3.2	2.9	2.2	2.0
ID	15.2	15.8	14.9	21.5	22.1	22.7	18.9	18.3	16.3	16.1	21.4	11.4	11.4	9.6
IL	15.2	14.8	16.6	17.9	17.7	18.2	19.5	18.8	18.2	17.6	15.1	10.4	7.8	6.9
IN	15.3	16.0	15.9	17.0	18.0	19.1	18.0	21.7	22.4	19.7	17.7	15.4	11.6	9.6
KS	17.2	19.2	21.0	25.5	27.9	25.8	24.8	15.5	13.8	8.5	6.5	6.1	5.7	5.8
KY	20.0	21.1	20.4	20.8	22.1	21.3	22.2	20.3	18.9	14.6	11.4	9.3	8.1	8.1
LA	11.2	10.6	12.0	14.1	14.9	15.8	16.9	21.3	21.2	21.6	22.0	24.9	23.5	22.7
MA	14.5	15.3	15.3	15.7	15.3	15.5	17.8	20.2	27.1	24.3	24.3	13.5	10.4	9.9
MD	16.2	15.6	15.8	15.9	16.9	19.5	19.8	17.6	20.1	18.8	17.1	15.2	15.4	14.3
ME	29.2	34.7	36.8	38.0	34.6	36.8	40.2	12.6	13.6	10.6	11.4	12.8	13.2	9.8
MI	21.4	22.2	22.7	24.3	22.9	23.1	23.6	20.7	19.6	19.2	16.5	13.2	12.5	9.0
MN	13.6	12.8	14.3	16.8	19.0	19.3	25.4	29.4	30.2	23.3	17.9	15.0	9.1	5.1
MO	15.8	15.8	16.0	17.5	17.9	18.8	19.6	17.7	14.8	9.0	8.3	7.8	7.6	6.7
MS	29.9	37.2	35.8	36.2	31.1	30.0	33.7	27.8	26.0	21.5	19.7	14.9	15.4	14.2
MT	16.5	15.1	18.8	20.9	21.8	22.7	24.9	16.4	13.4	15.1	11.6	13.7	14.5	10.2
NC	25.6	26.4	25.7	27.1	27.7	28.6	29.5	21.8	20.5	17.0	11.6	9.3	7.6	6.9
ND	20.4	21.2	20.8	26.4	31.4	35.5	35.7	9.8	11.3	12.1	15.0	13.2	12.2	7.1
NE	16.5	17.3	17.6	20.1	21.4	21.3	22.6	8.6	7.1	4.9	3.8	3.5	3.5	2.9
NH	18.5	20.4	24.7	27.6	27.1	24.1	32.1	11.0	8.2	11.4	12.7	11.5	10.4	8.4
NJ	15.1	15.7	16.2	17.2	17.8	17.4	19.2	10.8	9.7	10.1	10.0	8.2	7.1	7.3
NM	14.8	13.7	12.7	12.8	14.7	15.8	18.5	16.4	16.3	16.5	19.2	17.2	14.7	8.8
NV	13.9	12.4	12.1	16.9	17.3	19.6	14.9	30.4	25.8	26.0	23.7	14.1	15.5	16.5
NY	44.2	50.1	54.1	57.4	59.5	58.8	55.7	15.7	14.5	14.0	13.1	11.6	10.5	9.6
OH	21.3	26.5	33.1	38.5	41.2	42.3	37.5	18.8	20.3	21.2	20.1	14.0	10.7	9.3
OK	14.2	12.7	13.7	14.2	14.5	13.8	15.0	13.7	14.0	15.4	15.4	16.2	16.0	13.2
OR	23.9	22.1	22.0	23.2	25.1	25.1	27.4	19.1	15.0	14.8	15.0	14.4	13.1	13.6
PA	16.4	16.5	16.7	17.6	17.0	17.1	19.1	28.2	27.5	26.8	22.0	15.2	11.9	9.4
RI	11.1	11.1	12.3	11.4	15.2	16.8	20.9	21.5	22.0	18.0	16.4	12.0	9.8	11.7
SC	22.9	25.9	27.2	30.5	32.0	30.2	28.7	31.1	25.8	19.3	14.5	8.9	6.6	6.4
SD	33.8	37.1	39.2	38.3	41.7	43.0	47.6	22.2	22.2	20.9	25.8	25.4	20.8	13.8
TN	15.5	15.7	16.1	18.1	17.8	18.9	20.3	25.0	23.1	20.8	18.9	14.5	13.5	13.0
TX	16.4	15.4	16.0	16.1	16.3	15.3	16.4	21.8	22.7	22.3	22.1	20.5	19.5	18.2
UT	9.3	9.7	9.2	11.9	11.4	14.6	15.6	15.0	17.8	19.6	19.1	15.4	15.4	13.6
VA	19.0	20.0	20.9	21.4	22.8	22.9	23.7	28.4	23.4	19.7	15.5	12.6	10.1	9.6
VT	20.9	18.0	24.8	24.4	29.9	31.8	41.7	8.2	13.3	11.1	12.4	14.4	11.3	13.6
WA	20.6	19.9	22.2	29.6	33.4	29.8	28.6	18.2	17.0	17.7	18.3	18.6	16.9	14.2
WI	14.0	14.5	16.0	18.1	17.7	18.5	19.3	29.2	34.2	32.6	33.8	24.1	17.0	11.7
WV	23.3	26.7	26.4	28.5	24.3	29.4	31.0	19.9	17.3	24.6	21.6	20.2	12.5	12.0
WY	14.7	17.0	19.3	21.6	22.4	20.6	19.2	19.3	23.9	29.6	17.3	19.9	19.1	13.3
US	18.3	19.2	20.3	22.3	22.8	23.2	24.0	20.3	20.2	18.7	17.3	14.5	12.3	10.9

Psychoactive Drugs

The percent of residents receiving psychoactive medications is reported in Table 16. Such drugs include anti-depressants, anti-anxiety drugs, sedatives and hypnotics, and anti-psychotics. In 1993, 32.9 percent of residents in facilities in the U.S. were reported to be receiving such medications. This percent increased to 50.3 percent in 1999. These percentages ranged from 28.0 percent in Hawaii to 59.1 percent in Vermont.

The increase is somewhat surprising because new federal regulations prohibit the use of anti-psychotics and other psychoactive drugs unless such drugs are shown to be necessary for particular resident problems. On the other hand, anti-depressants are frequently underprescribed and new educational efforts are focused on the appropriate use of anti-depressants.



Mental Retardation

New federal regulations from OBRA 1987 require screening of all new residents to ensure that those who are mentally retarded, developmentally disabled, or mentally disabled are placed in appropriate facilities where they receive services designed to meet their needs. Only those with exceptional needs are appropriately placed in nursing facilities. The percent of residents with mental retardation was reported. This includes residents who have mild to profound mental retardation. Table 16 shows that 2.7 percent

of residents were mentally retarded in 1993 and this declined slightly to 2.6 percent in 1999.

TABLE 16
PERCENT OF RESIDENTS
RECEIVING PSYCHOACTIVE MEDICATION AND HAVING MENTAL RETARDATION

State	Receiving Psychoactive Medications							Mental Retardation						
	1993	1994	1995	1996	1997	1998	1999	1993	1994	1995	1996	1997	1998	1999
AK	25.4	32.0	37.0	40.0	47.9	47.3	52.5	2.2	2.2	2.3	2.5	2.4	1.5	1.2
AL	34.3	37.1	37.3	40.7	43.3	46.0	49.2	4.7	5.1	5.0	5.0	5.2	5.3	5.3
AR	36.0	36.7	42.6	47.1	48.1	51.9	52.4	4.4	4.0	4.1	3.8	3.8	4.2	3.8
AZ	28.8	33.3	37.4	42.1	44.7	45.1	47.6	1.0	1.0	2.9	0.9	0.9	0.9	1.8
CA	28.3	30.2	33.5	37.1	39.2	40.9	42.7	1.5	3.0	2.4	2.0	2.4	2.0	2.0
CO	32.4	31.0	37.1	42.9	44.6	48.5	49.6	1.7	1.8	1.8	1.3	1.5	1.4	1.4
CT	36.4	37.5	45.7	48.8	51.0	53.2	56.1	3.4	2.8	2.3	2.4	2.2	2.3	2.2
DC	24.5	21.8	24.8	26.5	34.1	43.3	35.9	6.5	4.5	2.8	1.2	2.2	2.6	1.7
DE	29.4	31.6	35.1	40.4	41.5	48.0	46.3	1.4	1.6	2.1	2.1	2.5	2.5	3.0
FL	28.7	30.5	36.4	41.2	43.6	46.7	46.9	1.2	1.4	1.4	1.4	1.4	1.2	1.4
GA	32.8	35.5	41.5	45.1	46.7	49.5	52.0	4.8	4.7	4.5	4.7	4.5	4.5	4.4
HI	16.1	17.6	17.3	20.8	20.7	23.6	28.0	2.0	2.7	2.2	2.1	1.9	2.7	3.0
IA	29.8	32.0	34.8	39.9	42.8	45.2	47.9	2.2	2.5	2.0	2.4	2.3	2.1	2.1
ID	35.7	37.3	41.9	45.5	48.5	50.0	54.0	1.8	1.6	1.6	1.6	1.5	2.3	1.3
IL	35.1	36.7	40.9	42.8	43.6	45.6	48.6	2.8	2.6	2.5	2.5	2.3	2.3	2.4
IN	35.6	38.4	42.7	46.5	49.1	51.3	52.5	3.8	3.5	3.7	3.3	3.4	3.5	3.4
KS	34.5	36.3	40.1	44.6	48.9	51.4	53.5	1.9	1.9	1.7	1.7	1.6	1.5	1.7
KY	35.8	36.2	38.5	44.5	46.0	49.6	51.9	3.6	3.2	3.3	3.4	3.7	3.5	3.6
LA	36.2	39.0	44.0	46.6	49.2	49.8	52.2	4.1	3.9	3.4	3.3	3.3	3.3	3.5
MA	38.5	41.0	44.3	51.4	52.7	55.8	56.6	3.2	2.7	3.0	3.0	2.9	2.7	3.1
MD	32.0	34.2	37.2	41.2	44.7	45.9	46.6	3.9	3.4	2.3	2.6	2.5	2.1	2.2
ME	35.1	38.3	42.4	47.2	50.9	54.5	55.7	1.6	1.7	1.7	2.0	1.9	1.7	1.7
MI	27.0	29.1	32.9	36.8	41.8	45.4	49.0	2.8	2.4	2.6	2.2	2.0	2.0	2.3
MN	36.9	39.3	43.5	46.4	47.6	51.2	51.9	1.9	1.8	1.7	1.8	1.9	1.8	1.6
MO	34.3	36.4	39.4	44.4	47.8	50.7	52.1	2.7	2.7	2.3	2.6	2.5	2.7	2.9
MS	33.6	36.0	39.0	43.8	45.7	48.8	49.1	2.8	3.3	2.2	1.8	1.8	2.2	2.2
MT	31.9	32.3	39.0	43.3	48.5	47.5	48.7	1.8	1.6	1.6	1.4	1.8	1.9	1.6
NC	30.2	32.3	38.8	44.9	47.6	50.7	50.6	2.1	2.1	2.0	2.1	2.1	2.2	2.3
ND	33.7	35.7	42.7	44.4	47.4	50.9	53.2	2.9	2.9	2.5	3.0	2.3	2.2	2.3
NE	32.1	33.7	37.2	42.1	45.9	48.8	50.3	2.4	2.4	2.2	2.3	2.4	2.4	2.2
NH	32.3	36.8	42.6	47.0	51.0	56.1	53.4	1.9	1.7	1.6	1.9	1.6	1.7	1.5
NJ	24.4	27.1	31.8	36.1	38.4	40.8	42.3	3.7	3.6	3.5	3.5	3.3	3.5	3.2
NM	23.0	25.6	31.8	36.1	39.3	44.8	48.6	1.6	1.6	1.4	1.6	1.7	1.7	1.5
NV	30.4	34.1	32.3	40.3	39.1	44.5	44.9	1.6	1.6	1.5	1.4	1.7	1.5	2.6
NY	29.5	31.2	33.8	36.9	40.1	42.3	44.3	3.9	4.2	4.2	3.6	4.4	4.1	4.2
OH	36.5	39.9	45.7	49.5	51.9	54.0	55.4	2.2	2.2	2.3	2.4	2.5	2.5	2.4
OK	29.5	29.1	33.9	40.5	44.2	46.3	46.2	2.9	2.7	2.7	2.7	2.3	1.9	2.3
OR	32.4	32.9	40.7	45.4	48.5	52.8	56.4	2.6	2.0	2.3	2.0	2.1	2.1	2.5
PA	35.3	36.6	43.3	46.3	47.4	49.5	51.6	3.2	2.6	2.7	2.5	2.4	2.3	2.3
RI	37.4	39.1	46.2	50.2	50.7	51.6	54.7	1.7	1.7	1.5	1.6	1.6	1.5	1.6
SC	28.2	31.4	40.0	41.1	44.2	45.3	49.9	2.0	2.7	2.0	2.0	2.0	2.0	1.8
SD	35.3	37.2	41.0	41.0	45.1	45.8	47.8	1.8	1.5	1.6	2.0	2.1	2.2	2.1
TN	35.9	38.6	44.8	49.8	51.8	54.4	55.4	3.3	3.4	3.3	3.0	3.0	3.1	3.7
TX	32.5	35.4	40.2	46.3	47.9	50.0	51.5	2.2	2.0	2.3	2.1	2.0	2.0	2.3
UT	39.8	40.3	47.1	47.0	55.0	54.5	54.7	1.8	1.8	1.6	2.0	2.2	1.8	2.0
VA	33.2	35.0	41.1	45.3	47.4	50.2	51.7	5.0	4.4	4.2	4.0	3.8	4.1	5.1
VT	35.5	37.8	44.2	49.5	52.0	55.9	59.1	1.8	1.6	1.6	1.7	1.7	1.6	1.7
WA	36.5	36.9	42.6	44.4	47.5	50.9	52.6	2.9	2.3	3.7	3.7	3.6	4.1	3.3
WI	35.0	36.9	40.5	45.1	47.9	48.9	51.5	1.7	1.7	1.7	1.6	1.5	1.4	1.4
WV	30.5	37.2	40.7	41.7	41.2	45.4	49.6	2.9	2.9	3.8	2.9	4.3	3.4	3.7
WY	36.8	32.2	34.9	41.5	43.8	46.3	47.0	2.2	1.9	1.8	2.1	2.0	1.8	1.7
US	32.9	34.8	39.5	43.6	46.1	48.5	50.3	2.7	2.7	2.6	2.5	2.5	2.5	2.6

Nursing Facilities, Staffing, Residents and Facility Deficiencies, 1993-1999

Department of Social & Behavioral Sciences

University of California San Francisco

Dementia & Other Psychological Diagnoses

Table 17 shows the percent of residents that were reported by facilities and states as having a dementia diagnosis. The average percent of residents reported with dementia increased slightly from 36.7 percent in 1993 to 41.4 percent in 1999. The percent varied from 31.9 percent in Illinois to 54.6 percent in Maine in 1999.

The percent of residents with other psychiatric conditions (other than organic mental syndromes) such as schizophrenia, mood disorders, and other problems is reported in Table 17. Other psychiatric conditions varied from 10.7 percent of residents in 1993 to 13.8 percent in 1999. The percentage of conditions varied from 4.1 percent in Hawaii to 20.5 percent in Louisiana and Ohio in 1999.

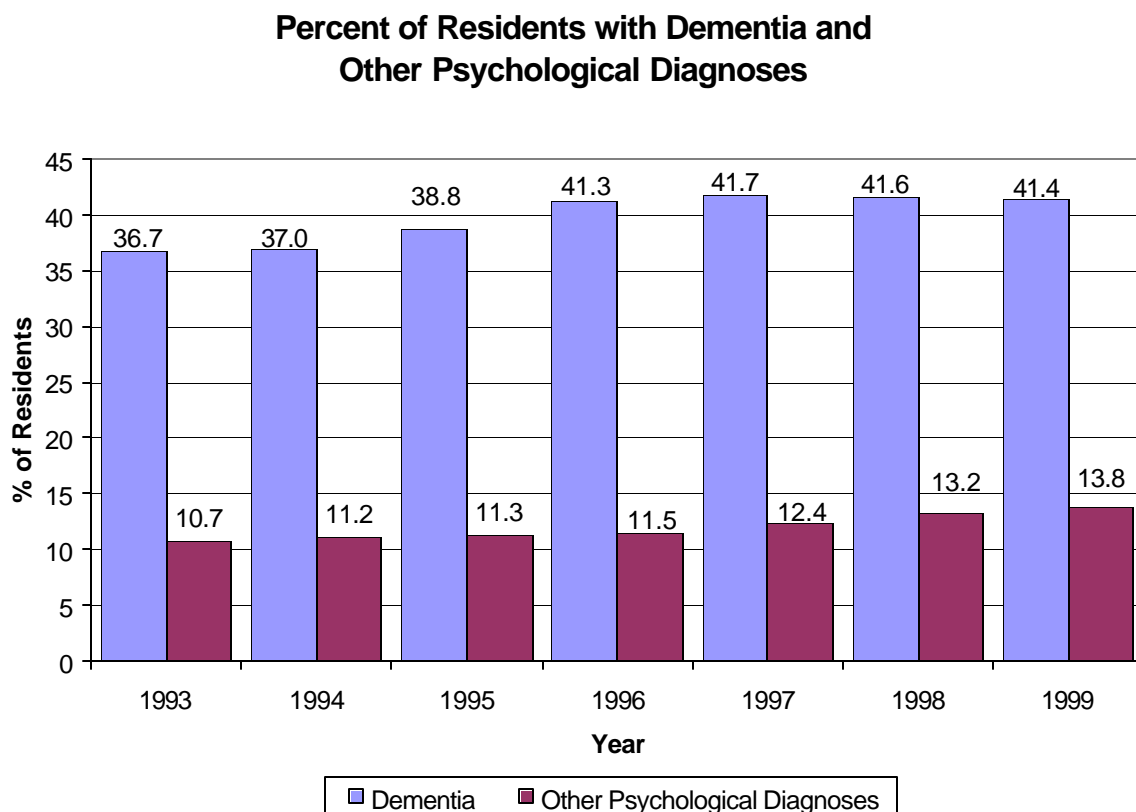


TABLE 17
PERCENT OF RESIDENTS
WITH DEMENTIA AND OTHER PSYCHOLOGICAL DIAGNOSES

State	Dementia							Other Psychological Diagnosis						
	1993	1994	1995	1996	1997	1998	1999	1993	1994	1995	1996	1997	1998	1999
AK	36.1	44.6	38.1	34.5	43.9	45.3	46.1	10.6	10.2	11.8	9.8	11.6	15.0	7.8
AL	43.0	43.3	44.6	45.4	47.9	49.5	50.2	8.4	10.1	10.3	9.8	12.1	12.8	13.3
AR	35.3	35.0	34.2	34.4	33.8	35.8	34.2	11.6	12.4	12.9	13.8	14.7	16.1	15.5
AZ	35.1	32.9	35.7	36.1	36.5	36.7	40.4	6.1	6.6	9.4	7.6	7.7	9.7	8.6
CA	31.9	32.2	33.5	36.2	35.6	35.5	35.3	10.1	11.1	11.7	12.2	12.4	12.9	13.2
CO	41.7	37.6	40.4	44.7	42.6	41.2	40.8	12.2	13.2	11.1	10.0	11.9	11.1	11.5
CT	39.7	40.0	41.3	42.1	43.1	44.0	43.9	14.5	15.1	13.6	12.0	11.5	12.8	11.7
DC	40.8	35.6	38.4	40.6	38.4	37.7	38.9	16.6	14.1	14.1	7.6	11.1	15.9	12.0
DE	36.3	38.6	41.8	41.6	39.7	37.2	42.1	10.5	11.3	10.1	11.4	9.1	14.7	11.5
FL	36.8	37.3	36.8	40.1	40.7	39.4	38.5	7.8	8.3	8.3	8.2	9.5	10.8	12.3
GA	35.4	38.1	42.1	44.5	45.2	46.5	47.1	10.6	10.7	10.1	12.4	13.7	13.5	14.1
HI	34.5	38.0	42.1	48.7	45.4	48.7	44.7	2.1	2.8	2.8	4.4	3.2	4.0	4.1
IA	37.6	37.1	40.0	43.9	46.0	44.9	45.4	10.0	9.7	9.1	8.7	10.2	10.7	12.0
ID	40.6	39.9	43.3	44.3	44.2	40.1	41.4	7.3	10.0	8.4	8.9	8.1	9.2	10.7
IL	29.5	28.5	30.5	32.5	31.8	31.8	31.9	14.5	14.5	15.0	15.8	16.6	17.3	18.5
IN	32.4	33.7	36.3	37.5	37.0	38.6	37.5	11.2	12.1	11.9	11.1	12.1	12.3	12.5
KS	31.8	33.2	34.8	39.6	41.4	43.0	42.7	11.7	12.3	12.3	13.0	14.5	17.5	19.7
KY	41.1	39.7	40.9	43.6	43.7	44.0	43.1	9.6	9.7	9.4	9.5	10.0	10.4	11.9
LA	27.8	28.1	29.3	30.8	33.2	34.9	34.2	11.7	12.9	13.2	14.6	17.4	19.1	20.5
MA	37.9	38.6	40.4	42.3	42.2	43.4	44.0	18.7	19.3	19.7	17.6	17.8	16.9	17.7
MD	39.9	44.1	41.8	40.9	41.3	40.7	37.9	16.0	14.3	14.7	11.8	13.3	11.8	11.0
ME	41.3	41.1	48.2	50.3	52.9	54.0	54.6	8.3	8.7	7.3	8.0	7.5	9.5	9.2
MI	44.0	46.4	49.2	52.1	54.9	54.3	53.2	10.6	12.0	12.2	9.9	11.2	12.8	13.4
MN	37.2	36.5	40.7	40.9	41.1	40.7	39.3	12.9	13.8	12.5	15.3	14.9	16.6	17.0
MO	33.5	34.4	36.3	36.8	38.4	38.7	38.4	11.7	13.1	11.6	12.3	13.0	13.9	15.1
MS	43.4	38.8	38.4	44.1	46.0	45.8	46.7	8.0	9.5	7.3	10.8	13.9	16.0	16.0
MT	37.8	40.9	38.1	42.7	44.2	44.1	39.5	7.5	9.1	7.2	7.7	11.8	11.0	10.1
NC	39.3	37.8	41.3	43.6	44.7	43.2	44.7	7.1	8.4	8.3	8.6	9.7	10.0	11.4
ND	37.3	38.9	36.7	40.0	41.4	41.6	45.3	11.8	12.1	11.7	13.5	12.0	12.0	13.6
NE	34.1	33.4	34.3	37.6	37.4	37.4	36.0	9.6	9.9	9.1	8.9	12.0	13.3	12.7
NH	40.0	37.8	40.3	41.4	45.5	44.4	44.0	9.8	10.9	10.7	10.6	9.9	15.3	11.3
NJ	38.2	39.0	40.8	41.5	38.5	39.5	38.8	11.8	12.5	12.1	11.5	11.5	11.5	11.3
NM	38.1	35.9	37.5	40.8	42.5	40.1	41.9	6.4	5.1	6.9	6.0	5.9	9.7	10.6
NV	39.1	35.6	33.0	40.3	33.9	38.9	42.2	5.4	6.9	6.2	11.7	10.0	12.8	17.6
NY	46.1	46.4	46.5	48.3	48.3	47.5	45.7	10.3	10.7	10.1	9.9	11.1	12.0	12.0
OH	37.8	38.5	42.9	46.7	47.5	46.3	45.1	13.6	14.5	17.1	17.7	18.9	19.4	20.5
OK	33.5	35.0	37.1	38.2	38.9	39.7	37.1	7.1	7.7	8.7	10.0	9.5	10.3	10.9
OR	43.0	44.0	47.5	48.4	49.6	46.7	48.4	11.5	11.7	11.8	10.7	11.6	12.1	12.1
PA	35.0	36.8	40.4	41.0	41.8	39.9	42.0	7.3	8.1	8.1	8.5	8.8	9.8	10.6
RI	39.6	45.1	47.9	47.0	48.5	43.3	43.5	13.3	13.5	11.4	10.9	11.2	11.7	11.8
SC	43.7	48.4	49.2	50.8	52.4	51.6	48.7	7.9	7.3	8.8	7.3	9.0	9.5	8.8
SD	34.7	37.6	39.2	40.9	43.7	46.3	46.1	12.0	10.4	12.3	9.8	10.0	13.9	15.1
TN	38.8	39.6	41.2	45.6	45.0	44.2	44.5	8.3	9.1	10.4	10.9	10.8	11.9	13.2
TX	34.6	34.3	36.3	38.6	39.2	37.9	38.1	9.9	10.0	9.9	10.3	12.1	11.7	13.0
UT	38.2	36.2	38.3	44.0	42.7	40.9	37.6	10.2	10.0	11.1	10.3	11.5	10.5	11.4
VA	41.7	42.7	44.5	44.9	44.6	45.7	44.6	8.8	10.4	10.0	10.4	9.9	11.4	13.6
VT	43.7	49.5	47.6	48.3	49.4	47.8	44.1	8.1	9.5	7.7	9.6	10.7	11.7	6.3
WA	44.5	43.2	39.9	50.5	52.3	53.0	51.8	8.3	6.2	7.4	9.9	10.7	13.0	12.5
WI	37.7	37.4	38.8	41.9	41.8	42.4	43.4	11.0	11.4	10.8	11.1	10.5	11.4	11.3
WV	25.1	21.9	34.8	46.2	39.8	39.6	41.7	4.0	4.0	6.9	9.0	13.5	13.8	13.9
WY	32.4	34.6	38.0	41.5	44.3	39.5	42.0	10.6	9.9	8.6	9.6	11.9	7.4	8.1
US	36.7	37.0	38.8	41.3	41.7	41.6	41.4	10.7	11.2	11.3	11.5	12.4	13.2	13.8

Pressure Sores and Skin Care

Pressure sores/ulcers (or decubitus ulcers) are areas of the skin and underlying tissues which erode as a result of pressure or friction and/or lack of blood supply. The severity of the ulcer ranges from persistent skin redness (without a break in the skin) to large open lesions which can expose skin tissue and bone. Table 18 shows the percent of residents in facilities with pressure sores was 7.5 percent in 1993 and 7.1 percent in 1999. The percent ranged from 3.1 percent in North Dakota to 11.4 percent in District of Columbia in 1999.

Special skin care is non-routine care according to a resident care plan or physician's order, usually designed to prevent or reduce pressure ulcers of the skin. In 1993, 30.2 percent and in 1999, 59.1 percent of nursing facilities reported providing special skin care to residents (See Table 18). Thus, as expected, the rate of such care is higher than the percent of actual pressure sores reported by facilities.

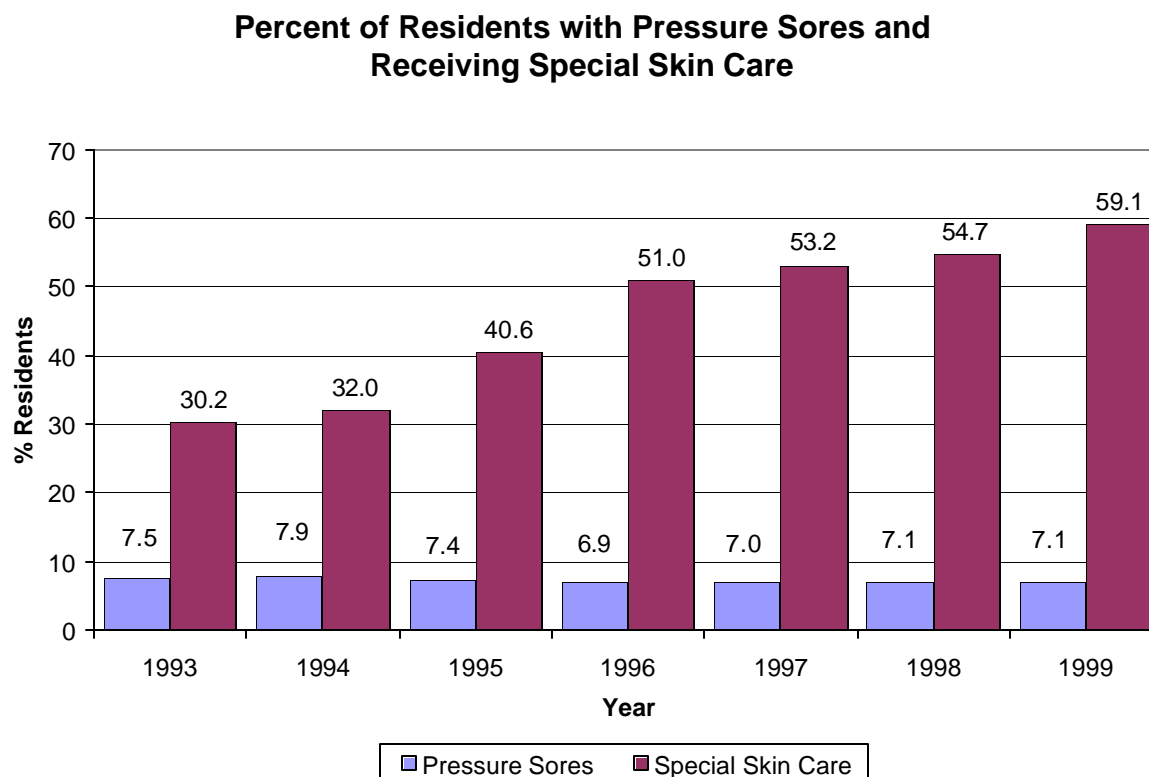


TABLE 18
PERCENT OF RESIDENTS
WITH PRESSURE SORES AND RECEIVING SPECIAL SKIN CARE

State	Pressure Sores							Special Skin Care						
	1993	1994	1995	1996	1997	1998	1999	1993	1994	1995	1996	1997	1998	1999
AK	4.2	3.5	2.1	4.1	7.0	4.1	8.8	42.8	36.9	45.2	49.5	57.9	71.5	76.2
AL	7.3	9.1	7.2	6.8	6.4	6.3	6.2	22.7	27.6	33.7	44.0	53.8	58.2	67.8
AR	7.5	7.9	7.4	7.9	7.8	7.9	9.0	21.2	22.1	32.7	45.3	46.9	50.9	54.9
AZ	8.1	10.3	8.3	7.4	8.5	9.2	7.1	25.9	28.0	40.3	50.2	56.7	52.7	53.7
CA	10.0	9.7	9.5	8.8	9.2	8.7	8.6	26.3	27.2	38.6	46.4	49.3	50.3	52.7
CO	6.2	7.6	6.6	5.5	5.6	5.4	6.0	26.4	29.9	39.6	50.4	54.6	53.9	56.5
CT	5.5	5.2	4.9	4.5	4.5	5.1	4.9	24.8	25.3	31.1	39.9	39.8	42.2	49.1
DC	10.7	8.8	8.7	9.9	13.6	9.8	11.4	23.9	31.2	33.0	47.1	60.5	57.7	59.5
DE	6.3	6.3	6.7	6.4	6.8	7.6	8.2	28.5	35.6	37.8	43.3	47.2	52.9	53.2
FL	8.8	8.6	9.0	7.9	8.2	8.5	8.1	32.0	33.5	42.2	52.4	55.6	59.5	64.9
GA	7.5	8.2	7.8	7.5	7.9	7.9	7.5	30.5	31.4	38.2	44.7	47.7	49.7	56.2
HI	6.4	5.6	4.5	5.4	6.6	5.0	3.5	19.4	39.3	48.6	61.2	51.4	54.7	63.6
IA	5.0	5.2	4.8	3.8	3.7	3.6	4.0	23.9	25.2	33.0	41.8	42.8	44.3	47.8
ID	4.7	6.5	7.8	5.1	4.4	5.1	5.1	30.4	30.3	41.0	41.9	46.2	44.2	62.1
IL	8.2	7.8	7.6	7.1	7.2	7.4	7.5	31.9	33.3	41.3	49.9	51.0	54.4	60.8
IN	7.5	8.3	7.9	6.7	6.8	7.3	7.1	32.6	33.4	43.0	49.9	55.9	55.4	59.5
KS	5.8	5.2	5.9	4.9	5.5	5.6	5.4	24.8	29.4	36.2	55.8	56.2	54.4	55.1
KY	8.4	9.4	8.5	7.7	7.4	7.8	8.7	30.2	30.2	35.8	51.3	49.3	55.2	61.5
LA	8.0	9.5	8.5	8.6	9.2	9.9	9.1	25.3	28.4	35.1	45.0	44.7	42.7	45.8
MA	8.3	7.7	6.4	5.7	6.1	6.0	5.8	37.5	37.8	43.4	55.9	58.6	62.7	66.7
MD	6.6	7.8	7.2	9.1	8.5	8.1	10.1	34.8	39.8	47.4	58.1	53.7	57.9	57.9
ME	4.6	5.5	5.2	4.5	4.7	6.2	5.8	40.7	45.0	51.4	71.3	73.3	64.5	65.0
MI	8.8	8.7	8.0	6.8	6.5	6.5	6.4	32.5	33.5	40.9	48.6	53.4	57.4	62.2
MN	4.3	3.9	3.5	3.9	3.6	3.4	3.6	28.2	29.7	37.0	41.4	43.9	46.4	55.2
MO	8.1	7.8	6.8	6.6	6.5	6.8	7.0	33.4	29.4	40.6	46.6	48.9	52.2	59.0
MS	7.4	10.5	9.0	7.5	7.9	8.3	8.0	31.9	33.1	44.9	64.3	54.4	54.6	66.2
MT	5.3	4.9	3.9	3.7	4.4	3.3	4.1	21.2	22.5	26.7	36.3	42.4	44.6	51.4
NC	8.8	9.0	8.5	8.1	8.0	8.3	8.0	32.2	32.9	44.1	55.8	57.0	56.4	59.5
ND	3.9	3.6	4.3	3.2	3.1	3.7	3.1	17.4	16.5	23.6	36.8	40.5	43.1	44.9
NE	4.8	4.4	4.5	3.7	3.6	4.3	3.9	32.7	32.8	46.4	56.4	55.7	55.8	63.8
NH	4.5	5.0	5.0	4.3	4.7	5.1	4.5	37.7	39.2	47.9	52.3	58.2	63.8	62.8
NJ	8.4	8.1	7.4	7.5	7.8	8.7	8.4	22.3	22.4	29.5	38.8	39.3	41.2	47.0
NM	6.7	8.6	8.8	6.9	9.3	8.5	7.1	24.9	23.4	41.7	55.4	52.3	50.9	53.1
NV	7.8	8.2	9.5	9.4	8.3	8.7	9.8	18.1	35.0	37.7	53.0	42.8	60.2	52.5
NY	6.9	7.0	6.9	6.4	6.6	6.7	6.9	32.8	32.5	38.5	49.3	53.9	56.7	58.7
OH	6.5	7.7	6.6	6.2	6.1	6.0	6.3	33.4	40.2	55.3	72.9	76.7	74.2	75.8
OK	7.6	8.1	7.7	7.3	7.7	7.5	8.1	28.6	28.6	35.3	43.0	45.8	43.4	42.2
OR	7.6	7.4	6.6	7.6	6.3	6.5	7.1	30.6	30.0	44.5	47.0	52.9	48.2	51.6
PA	8.7	9.4	8.3	7.7	7.9	8.4	8.3	35.4	37.6	45.4	51.1	54.9	58.7	62.7
RI	4.0	4.6	4.5	5.8	4.5	6.3	6.1	29.3	30.6	38.4	43.0	47.2	47.9	58.9
SC	6.7	9.0	7.7	7.4	8.1	8.0	8.0	31.1	36.3	43.3	61.2	59.7	61.3	58.6
SD	4.3	4.2	4.6	4.6	5.0	4.3	4.9	39.2	46.3	58.6	77.0	84.0	78.5	74.5
TN	7.8	7.5	8.2	7.4	7.3	7.8	8.6	23.3	24.0	33.9	48.7	50.6	52.4	60.4
TX	9.8	9.5	10.0	9.0	9.4	8.9	8.6	24.6	26.1	34.6	47.7	49.8	51.1	54.7
UT	4.7	5.8	5.5	5.6	5.3	5.6	6.3	23.4	21.1	31.6	45.2	54.7	48.5	56.7
VA	9.1	8.7	8.5	8.0	8.7	7.7	8.3	36.1	35.6	42.9	52.0	52.3	54.6	60.5
VT	5.6	5.4	5.1	3.6	4.6	5.0	4.9	39.1	47.6	56.4	62.0	68.1	65.9	77.2
WA	6.8	6.4	6.6	6.1	6.2	6.7	6.5	49.9	57.1	57.2	62.9	65.5	68.8	75.8
WI	5.2	5.4	5.4	5.1	4.6	4.8	5.4	30.6	31.3	39.8	46.6	47.7	50.0	54.4
WV	9.4	11.5	11.2	7.0	7.1	7.9	7.9	56.8	70.8	70.8	80.9	71.5	72.1	76.7
WY	7.8	6.4	7.2	4.0	5.1	5.8	5.2	21.1	29.1	37.9	43.4	65.8	52.5	53.0
US	7.5	7.9	7.4	6.9	7.0	7.1	7.1	30.2	32.0	40.6	51.0	53.2	54.7	59.1

Rehabilitation and Other Special Treatments

Rehabilitation services are provided under the direction of a rehabilitation professional (physical therapist, occupational therapist, etc.) to improve functional ability. In 1993, 18.8 percent of residents in nursing facilities received such services and this decreased to 16.4 percent in 1999 (See Table 19). These services varied from 7.0 percent of residents in South Dakota facilities to 38.7 percent in Alaska.

Ostomy care includes special care for a skin opening to the intestinal and/or urinary tract such as a colostomy (opening to the colon). Such care was provided to 2.2 to 3.3 percent of nursing facility residents in 1993-1999 (See Table 19).

TABLE 19
PERCENT OF RESIDENTS
RECEIVING REHABILITATION AND OSTOMY CARE

State	Rehabilitation							Ostomy Care						
	1993	1994	1995	1996	1997	1998	1999	1993	1994	1995	1996	1997	1998	1999
AK	33.6	64.3	31.6	33.1	38.4	46.0	38.7	3.9	2.9	4.1	2.8	2.9	7.0	8.0
AL	9.7	13.1	12.8	13.0	13.6	13.4	12.2	2.4	2.7	3.4	3.9	4.5	5.4	6.4
AR	17.3	17.6	15.8	16.9	16.7	15.0	15.1	1.8	2.2	1.9	1.8	2.7	3.4	4.0
AZ	21.5	28.1	24.9	24.6	26.7	24.5	19.0	2.0	2.0	2.6	2.0	1.8	2.4	1.6
CA	18.4	20.1	20.1	18.7	19.3	18.7	16.0	2.3	2.4	2.4	2.5	3.0	3.5	4.1
CO	22.2	22.5	24.9	22.9	24.1	21.6	17.2	2.3	2.0	2.0	1.7	2.0	2.3	2.4
CT	15.9	17.4	15.8	15.8	15.9	16.3	13.7	2.0	2.0	2.0	2.0	1.9	2.0	2.2
DC	24.4	27.2	29.2	26.3	25.0	21.6	16.6	5.9	5.7	1.5	1.6	1.9	2.9	2.4
DE	16.8	16.7	17.9	19.6	23.3	22.5	18.1	2.9	2.3	2.5	1.8	2.2	2.7	2.4
FL	18.9	22.2	24.5	25.2	26.6	26.0	22.3	2.2	2.4	2.5	2.4	2.7	3.1	3.6
GA	18.3	19.6	17.7	15.6	15.6	16.1	12.6	2.0	1.9	2.2	2.2	2.3	2.4	2.9
HI	16.4	19.7	15.9	16.5	12.7	15.4	10.0	5.2	3.1	4.9	2.3	2.9	3.2	3.9
IA	15.7	15.8	15.8	13.7	15.1	13.7	12.1	1.5	1.7	1.8	1.7	2.2	1.8	2.2
ID	19.9	27.9	26.2	19.9	27.6	21.0	19.9	1.6	1.9	2.0	1.9	1.5	1.7	1.9
IL	34.0	32.7	28.3	20.9	20.7	19.4	17.4	2.7	2.8	2.7	2.8	3.0	3.4	3.6
IN	13.0	14.2	16.2	17.4	18.8	19.3	16.8	2.1	2.3	2.1	2.1	2.5	2.9	3.5
KS	20.2	17.6	17.5	17.3	16.5	14.1	12.3	1.7	1.7	2.0	1.8	1.7	1.9	1.8
KY	18.1	19.5	20.5	18.1	20.9	19.8	17.4	2.4	3.0	4.0	2.9	3.0	3.1	4.1
LA	11.2	15.0	15.4	16.8	17.5	16.7	13.6	3.1	2.8	3.2	3.1	3.5	3.8	4.2
MA	19.8	24.6	26.6	18.9	20.6	20.5	16.0	2.1	2.3	1.9	2.3	2.3	2.3	2.3
MD	13.7	14.3	16.2	17.4	19.7	22.7	21.1	2.2	2.6	2.3	2.4	2.8	2.7	3.4
ME	7.8	9.9	10.3	12.9	15.7	15.2	12.8	2.8	2.6	2.7	2.9	3.2	3.5	3.6
MI	13.6	14.6	14.6	14.9	15.7	15.4	14.1	2.2	2.1	1.9	2.0	2.1	2.4	2.6
MN	21.3	20.1	20.2	16.0	16.9	15.1	11.7	2.1	2.1	2.1	1.9	2.1	2.1	2.2
MO	25.5	27.0	26.4	23.2	21.8	21.6	17.0	2.2	2.2	2.0	2.1	2.1	2.6	2.4
MS	12.2	17.6	20.4	21.5	24.1	23.3	19.2	3.2	3.8	3.6	3.8	5.2	5.0	4.9
MT	15.7	15.6	17.3	16.7	17.4	16.9	16.1	1.7	1.6	2.1	1.8	1.7	1.6	1.7
NC	15.0	16.7	16.9	17.7	18.8	17.5	14.3	2.3	2.5	2.4	2.5	2.8	3.0	4.0
ND	46.2	44.1	44.1	27.9	26.9	21.8	14.4	1.6	1.8	2.1	2.4	2.8	2.1	2.7
NE	18.9	16.3	16.0	15.1	13.9	13.4	11.9	1.8	1.9	2.0	1.8	2.2	2.3	2.7
NH	17.2	19.7	20.7	19.1	19.4	19.2	17.1	1.9	2.0	1.8	2.3	1.9	2.0	2.1
NJ	14.0	15.0	15.4	14.6	16.1	19.5	17.7	1.8	2.5	2.5	2.1	2.4	2.8	3.3
NM	18.7	22.2	25.8	23.8	26.7	24.3	17.5	2.0	2.8	1.9	1.6	2.3	2.1	2.0
NV	17.4	17.8	20.4	26.3	32.9	24.3	20.3	1.6	1.8	2.9	1.9	3.4	3.1	3.2
NY	19.1	19.2	19.1	19.2	19.6	20.6	18.2	3.7	3.3	3.2	3.5	4.1	4.2	4.5
OH	15.1	17.0	16.3	15.8	16.9	16.4	16.2	2.4	2.8	3.0	2.9	3.8	4.0	5.3
OK	27.0	29.3	22.8	19.1	19.2	17.8	15.4	2.3	2.1	1.9	1.9	2.1	2.5	2.7
OR	14.5	17.5	14.6	14.0	14.4	15.6	13.6	2.3	1.8	2.2	2.4	2.1	2.0	2.4
PA	20.7	20.9	23.7	24.0	26.6	25.8	22.6	2.6	2.4	2.5	2.4	2.5	2.9	2.8
RI	8.5	10.3	12.1	9.1	12.1	14.8	10.9	1.9	1.8	2.0	1.8	1.9	2.1	2.2
SC	11.0	15.0	16.1	18.5	22.3	20.8	21.1	2.5	3.1	3.5	3.1	2.9	2.8	2.9
SD	17.9	17.1	18.7	16.9	10.6	12.7	7.0	1.9	2.1	1.9	2.2	2.3	2.8	2.8
TN	17.6	22.6	22.8	20.2	22.0	21.0	18.9	1.9	1.9	2.0	1.7	2.2	2.0	2.2
TX	14.0	17.7	18.5	19.6	19.6	19.9	16.4	1.8	2.3	2.3	2.0	2.4	2.4	2.8
UT	33.5	36.4	32.7	25.3	29.7	30.7	28.8	1.2	1.8	1.9	2.5	2.0	1.4	1.8
VA	17.1	16.2	15.4	14.9	16.5	15.4	16.3	2.0	2.4	2.5	2.7	2.7	2.9	3.6
VT	11.6	10.1	10.5	12.3	13.0	17.7	11.3	3.4	2.6	2.7	1.9	2.6	4.1	2.9
WA	31.9	34.0	26.8	20.4	20.7	17.9	17.0	1.7	1.9	2.0	2.4	2.4	2.9	3.3
WI	18.1	19.3	18.4	17.0	17.5	15.3	13.1	1.9	1.9	1.9	1.8	2.2	2.2	2.1
WV	12.6	15.2	15.4	16.3	20.3	24.8	19.3	2.2	2.6	3.1	3.0	3.5	6.5	5.4
WY	24.4	18.8	18.4	26.7	17.1	20.4	21.2	1.5	2.5	2.1	2.6	1.2	1.5	2.3
US	18.8	20.2	19.9	18.6	19.5	19.0	16.4	2.2	2.4	2.4	2.4	2.7	2.9	3.3

Injections and Intravenous Therapy

Injections are provided by facilities for a variety of medications. In 1993, 11.5 percent of residents in facilities were receiving injections compared with 12.6 percent in 1999 (See Table 20). The percent receiving injections ranged from 9.7 percent in New Hampshire and Oklahoma to 16.9 percent in District of Columbia in 1999.

Intravenous therapy and/or blood transfusions are used to provide fluid, medications, nutritional substances, and blood products for residents. The percent of resident reported receiving such therapy in nursing facilities was 1.5 percent in 1993 and 2.7 percent in 1999 (See Table 20).

TABLE 20
PERCENT OF RESIDENTS
RECEIVING INJECTION AND INTRAVENOUS THERAPY

State	Injections							Intravenous Therapy						
	1993	1994	1995	1996	1997	1998	1999	1993	1994	1995	1996	1997	1998	1999
AK	16.5	15.2	12.8	18.5	12.4	11.5	13.2	0.7	2.8	2.0	4.0	3.5	5.5	5.1
AL	13.9	14.7	13.5	11.1	12.1	12.1	13.2	0.3	0.5	0.8	0.6	0.9	0.8	0.9
AR	11.4	12.0	10.9	11.2	11.7	11.2	13.1	1.2	2.4	2.0	2.3	4.4	2.5	4.0
AZ	9.5	11.2	10.1	12.0	12.4	13.6	13.0	3.7	7.2	5.5	5.5	6.5	7.6	4.5
CA	10.2	10.7	11.1	11.1	11.8	12.6	12.8	2.5	3.3	3.6	3.1	4.0	4.1	3.7
CO	12.4	12.7	12.5	10.1	10.6	10.4	11.0	1.7	2.0	1.4	1.4	2.6	2.8	1.8
CT	10.3	10.7	9.7	9.3	9.1	9.6	11.2	0.1	0.2	0.2	0.4	0.5	0.6	0.8
DC	12.8	13.8	14.7	16.5	16.6	18.3	16.9	0.0	2.2	1.3	0.9	2.6	1.0	0.4
DE	9.2	9.3	8.3	9.2	9.7	10.8	10.1	0.3	0.4	0.9	0.9	3.1	2.1	1.2
FL	10.3	10.9	11.0	10.5	12.1	12.3	12.6	1.1	1.5	2.0	2.2	2.7	3.2	2.6
GA	11.7	12.8	12.3	10.9	11.3	12.7	12.6	0.8	0.6	1.0	0.7	1.7	1.3	1.0
HI	9.3	9.2	8.8	9.7	9.6	8.3	10.4	3.2	2.2	2.3	2.3	3.7	1.7	1.8
IA	9.9	10.5	10.0	8.9	8.9	9.7	10.0	0.9	1.3	1.1	1.3	0.9	1.3	1.5
ID	9.8	12.6	13.4	11.1	11.5	12.4	12.3	0.3	2.3	1.5	1.9	1.9	2.2	1.5
IL	11.5	12.3	11.9	11.4	11.3	12.4	13.3	1.6	2.5	2.6	2.7	2.8	2.7	2.7
IN	12.6	13.6	12.2	12.1	12.9	13.1	13.4	2.3	2.8	2.9	2.3	3.1	3.2	3.2
KS	11.1	12.0	11.2	9.4	10.0	10.0	10.7	1.5	2.2	2.0	1.5	2.3	2.1	1.8
KY	12.9	14.0	14.2	11.8	13.7	13.3	14.6	2.5	3.1	3.4	3.3	3.9	3.2	3.7
LA	14.0	15.2	14.8	13.6	13.9	14.5	14.1	4.9	7.3	5.5	5.9	5.8	6.5	5.8
MA	11.6	11.6	11.4	8.5	9.2	10.0	10.7	0.2	0.4	0.8	1.1	1.4	1.8	1.7
MD	11.3	11.2	12.5	13.1	12.8	14.7	16.1	0.7	0.6	1.6	1.5	2.6	3.6	3.4
ME	9.9	11.6	10.3	9.4	10.5	11.5	10.7	0.2	0.3	0.3	0.7	1.0	0.6	0.9
MI	10.7	11.3	10.2	9.4	10.2	10.6	11.3	0.3	0.3	0.4	0.4	0.7	0.9	0.9
MN	10.6	11.3	10.0	9.2	10.0	9.8	10.8	0.3	0.4	0.4	0.4	0.4	0.5	0.5
MO	13.7	13.5	12.5	11.0	11.4	12.2	13.0	4.1	3.5	3.7	3.5	3.4	4.1	4.6
MS	13.6	13.7	13.0	13.6	15.8	16.4	15.7	1.5	1.9	2.4	4.2	4.9	5.4	3.3
MT	9.3	9.7	9.2	9.6	12.5	11.9	12.6	0.9	0.6	0.8	1.0	0.6	1.2	1.8
NC	13.6	13.5	13.4	12.4	13.1	13.8	14.9	0.8	1.2	1.0	1.4	1.7	1.8	1.7
ND	11.3	11.9	11.0	10.7	12.5	10.6	12.0	0.2	1.3	3.2	1.4	2.0	2.5	1.9
NE	10.4	11.7	11.2	9.3	10.1	10.2	10.7	0.8	0.9	1.6	1.1	1.3	1.4	2.7
NH	9.6	11.3	9.0	7.5	8.4	9.6	9.7	0.7	0.2	0.2	0.3	0.3	0.4	0.6
NJ	8.1	9.1	8.2	7.8	8.2	8.9	9.9	0.2	0.3	0.4	0.5	0.7	1.4	1.4
NM	9.5	10.1	15.2	12.4	14.5	12.7	12.2	0.5	2.4	2.2	4.8	2.7	2.5	1.8
NV	6.7	13.0	10.0	11.1	13.5	19.2	15.2	0.9	4.6	2.8	5.8	7.6	5.0	3.9
NY	11.0	10.9	9.8	8.8	9.1	10.1	10.8	0.2	0.2	0.3	0.4	0.4	0.5	0.5
OH	12.1	13.8	12.5	12.7	12.7	13.9	14.9	1.3	2.0	1.6	2.1	2.3	2.4	3.0
OK	13.1	12.6	11.8	10.2	9.8	10.8	9.7	1.8	2.6	2.4	2.5	3.6	4.4	2.7
OR	9.0	9.7	9.0	9.7	10.5	10.6	11.0	0.8	1.5	1.1	1.1	1.3	1.9	1.6
PA	12.1	13.4	12.8	12.3	13.8	14.0	13.9	1.8	2.2	2.7	2.8	3.5	4.2	3.7
RI	10.8	10.7	10.4	8.8	8.8	10.8	10.3	0.1	0.1	0.3	2.0	0.9	1.4	1.6
SC	12.8	15.5	13.9	11.4	12.1	13.0	13.4	0.5	0.5	1.5	1.6	3.0	2.7	2.4
SD	11.8	11.0	9.9	9.0	9.4	10.4	11.0	0.3	0.5	0.7	0.6	0.9	0.8	0.5
TN	13.1	13.9	13.3	11.5	12.6	14.1	14.4	1.8	2.5	2.5	2.6	3.0	4.3	4.2
TX	12.8	13.3	12.8	12.1	12.3	12.7	13.3	3.5	4.7	4.8	4.6	4.7	4.8	4.3
UT	13.2	12.4	11.9	11.4	12.6	12.3	12.9	2.7	2.0	3.1	2.7	2.2	2.3	5.1
VA	11.8	12.3	12.0	11.0	12.8	11.6	12.1	0.8	1.5	1.5	1.6	2.0	1.6	1.9
VT	8.1	9.9	10.8	9.3	11.0	10.2	11.0	0.0	0.4	0.3	0.2	0.9	1.1	0.7
WA	10.0	10.0	9.5	10.1	11.4	14.1	14.4	1.0	1.4	1.3	2.0	2.0	2.7	2.3
WI	10.6	11.5	10.3	9.5	10.2	10.5	10.2	0.3	0.3	0.4	0.7	0.8	0.8	0.9
WV	12.3	12.9	14.9	11.6	12.8	13.5	13.7	2.8	3.8	3.8	4.0	6.5	6.0	5.0
WY	11.5	10.1	11.7	9.8	10.1	10.5	13.3	4.1	1.1	2.0	2.2	3.1	2.5	4.9
US	11.5	12.2	11.6	10.9	11.5	12.1	12.6	1.5	2.1	2.1	2.2	2.6	2.8	2.7

Tube Feeding

Tube feedings are used to provide nutritional substances to residents into the gastrointestinal system. Table 21 shows that in 1993, 5.7 percent of residents were receiving tube feedings compared with 7.0 percent in 1999. The percent varied from 2.1 percent in Idaho and South Dakota to 17.5 percent in District of Columbia in 1999.

Respiratory Therapy

Respiratory treatment is provided for respirators/ ventilators, oxygen, inhalation therapy, and other treatment. In 1993, 5.7 percent of facility residents received treatment compared to 8.8 percent in 1999 (See Table 21). Wyoming reported 20.3 percent of residents receiving respiratory treatment compared to 5.7 percent in Hawaii.

TABLE 21
PERCENT OF RESIDENTS
RECEIVING TUBE FEEDING AND RESPIRATORY TREATMENT

State	Tube Feeding							Respiratory Treatment						
	1993	1994	1995	1996	1997	1998	1999	1993	1994	1995	1996	1997	1998	1999
AK	5.7	5.3	4.9	4.6	6.0	8.2	8.5	8.9	9.1	10.5	10.9	14.4	11.9	10.3
AL	8.4	10.1	11.8	11.8	12.5	13.0	13.3	2.9	4.1	4.4	5.0	5.3	6.2	7.1
AR	5.4	5.7	5.2	5.8	6.1	6.5	6.6	4.6	5.4	6.5	6.1	6.1	7.7	8.2
AZ	5.0	5.5	4.6	4.3	6.1	5.7	5.0	8.9	14.0	10.2	10.0	11.5	11.1	11.0
CA	9.5	9.5	9.8	10.4	11.1	11.8	11.3	6.4	7.0	7.9	7.7	8.9	8.8	8.8
CO	3.2	3.6	3.2	3.3	3.4	3.8	3.7	12.1	15.3	15.6	12.7	13.8	15.2	17.8
CT	3.3	3.5	3.8	4.0	4.2	4.6	4.5	4.3	5.3	5.6	6.0	6.6	7.4	7.5
DC	8.7	15.2	10.6	13.0	13.6	13.4	17.5	3.0	9.1	3.6	5.5	6.8	4.8	7.2
DE	5.8	6.5	7.4	7.6	7.9	6.8	10.6	4.7	4.2	4.9	6.5	8.4	7.4	7.6
FL	7.6	7.7	7.9	8.1	8.7	8.9	9.1	5.6	6.6	8.0	8.2	8.6	9.3	9.4
GA	7.3	8.0	8.6	9.2	9.2	9.6	8.9	3.6	4.3	5.5	5.0	6.5	7.4	6.5
HI	17.2	13.7	18.3	14.7	13.5	15.0	14.9	6.3	3.9	4.5	7.0	4.4	4.1	5.7
IA	2.3	2.5	2.4	2.3	2.5	2.6	2.6	5.5	6.4	6.5	6.7	6.7	7.5	7.3
ID	1.8	2.5	2.2	2.3	2.5	2.0	2.1	7.7	9.0	10.8	9.8	10.3	10.9	14.1
IL	4.1	4.1	4.1	4.4	4.5	4.8	4.9	4.5	4.8	5.1	5.4	6.5	6.4	6.4
IN	5.2	6.1	6.3	6.2	6.2	6.3	6.0	8.7	9.2	8.6	8.4	8.8	9.0	9.1
KS	1.5	1.8	2.1	2.0	2.1	2.6	2.4	5.4	6.0	6.9	7.2	8.2	7.9	8.5
KY	11.2	12.4	12.8	11.2	11.3	10.5	11.2	10.6	11.5	10.5	10.0	10.8	11.8	12.2
LA	8.2	8.7	8.3	9.3	10.4	10.9	10.3	5.9	9.2	8.1	8.9	8.3	8.5	9.7
MA	2.9	3.3	3.3	3.9	3.9	4.0	4.3	4.4	5.2	5.9	6.2	7.3	7.7	7.9
MD	7.7	7.9	9.1	9.3	9.3	8.7	10.4	4.0	4.5	6.2	6.9	7.0	7.5	7.6
ME	2.7	2.3	2.3	2.8	3.2	2.9	3.1	5.0	6.0	5.7	6.9	7.7	8.8	8.4
MI	4.7	4.8	4.7	4.9	5.0	5.2	5.8	4.5	5.0	5.4	5.9	6.6	6.4	6.8
MN	2.1	2.0	1.9	2.0	2.1	2.2	2.1	4.8	5.5	5.9	6.4	7.4	7.6	7.9
MO	5.8	5.6	4.9	5.5	5.2	5.6	5.6	8.6	7.9	8.2	7.9	8.5	9.1	9.8
MS	6.9	8.0	7.6	8.4	9.1	9.2	9.6	3.0	4.2	5.2	5.8	7.4	7.9	8.0
MT	2.0	2.1	2.0	2.0	2.2	2.5	2.4	9.3	10.8	10.4	11.7	11.5	11.2	12.0
NC	9.3	9.7	9.7	9.7	10.1	10.5	10.4	5.0	5.9	6.7	6.3	7.3	7.7	7.9
ND	2.5	2.3	3.2	3.0	2.6	2.5	2.9	3.5	5.5	7.0	6.5	7.7	7.5	8.5
NE	1.9	2.0	2.1	2.2	2.3	2.5	2.7	5.0	6.0	6.7	6.8	7.6	8.2	9.3
NH	1.2	1.8	1.9	2.4	1.8	2.5	2.3	4.2	5.1	5.1	7.1	5.7	7.5	8.7
NJ	7.4	7.9	7.9	7.6	7.8	8.0	8.4	3.1	3.4	3.7	3.4	4.9	6.1	7.4
NM	3.4	3.1	3.5	3.4	3.9	4.1	3.6	9.0	11.6	10.6	13.3	14.8	13.0	12.7
NV	6.1	9.5	7.7	8.5	8.4	10.9	9.2	7.1	11.1	10.7	14.0	13.1	12.8	13.4
NY	7.0	7.5	7.3	7.7	8.0	7.9	8.2	3.0	3.5	3.9	4.4	5.3	6.1	6.7
OH	6.5	7.0	7.1	7.6	7.7	7.8	8.1	6.8	7.2	7.3	8.6	9.4	9.8	10.2
OK	5.7	6.3	5.8	6.3	7.1	6.6	6.8	5.9	6.7	6.0	6.7	7.6	8.8	6.7
OR	3.8	3.5	3.6	4.2	4.2	3.9	4.7	5.0	5.7	6.0	4.1	5.7	5.4	6.2
PA	6.4	6.3	6.3	6.5	6.6	6.7	6.8	6.4	7.1	8.7	9.8	10.4	11.6	11.3
RI	2.5	2.6	2.8	3.1	3.3	4.2	3.7	2.7	3.8	5.1	4.7	5.4	4.5	6.4
SC	7.1	8.9	8.5	8.8	9.4	9.8	10.0	2.5	3.5	5.2	4.3	7.0	6.6	6.3
SD	1.3	1.6	1.7	1.7	1.9	2.3	2.1	4.8	5.1	6.2	6.2	7.0	7.2	8.6
TN	8.1	8.1	8.7	8.5	7.9	8.2	8.6	4.9	6.7	7.5	6.9	8.6	8.6	9.0
TX	6.6	7.7	8.1	8.1	8.5	8.4	8.7	6.3	7.9	8.1	9.1	9.2	9.4	9.7
UT	2.7	2.5	2.5	2.5	2.2	2.7	2.6	9.6	9.4	10.5	8.8	11.1	12.1	11.5
VA	8.1	7.9	8.6	8.1	9.1	9.2	9.4	6.1	6.5	7.7	8.1	8.4	8.3	9.3
VT	2.9	1.0	2.3	2.0	3.4	2.8	2.6	4.3	6.7	4.9	6.1	7.5	7.6	7.0
WA	3.9	4.4	4.8	4.4	4.9	4.8	5.1	6.1	6.8	6.6	6.7	7.5	8.2	8.6
WI	2.7	2.8	2.8	2.7	2.9	2.7	2.7	4.7	5.3	5.5	5.9	6.7	7.3	7.0
WV	6.7	6.9	8.8	7.2	6.6	7.1	7.1	6.5	7.8	8.8	9.6	12.7	10.9	11.1
WY	2.1	1.6	2.0	2.4	1.7	1.9	3.1	17.7	15.1	14.4	15.1	14.9	20.0	20.3
US	5.7	6.2	6.3	6.5	6.7	6.9	7.0	5.7	6.6	7.0	7.3	8.1	8.5	8.8

Urinary Incontinence and Bladder Training

Bladder or urinary incontinence more often than one time a week is a common problem in nursing facility residents. Table 22 shows that 48.1 percent of all residents were reported to have this problem in 1993 compared with 51.9 percent in 1999. This percentage ranged from 37.7 percent in West Virginia to 66.9 percent in District of Columbia.

Bladder training programs are designed to assist residents to gain control and maintain bladder control (such as by pelvic exercises or frequently toileting). Table 22 shows that the percent of residents with training programs ranged from 5.0 percent between 1993 to 5.8 percent in 1999 in the U.S. These programs vary across states with 1.7 percent of West Virginia facilities to 19.9 percent of Maine facilities having such programs in 1999. The discrepancy between the high percentage of residents with incontinence problems and the low percentage of training programs is notable.

**Percent of Residents with Bladder Incontinence
& in Training Program**

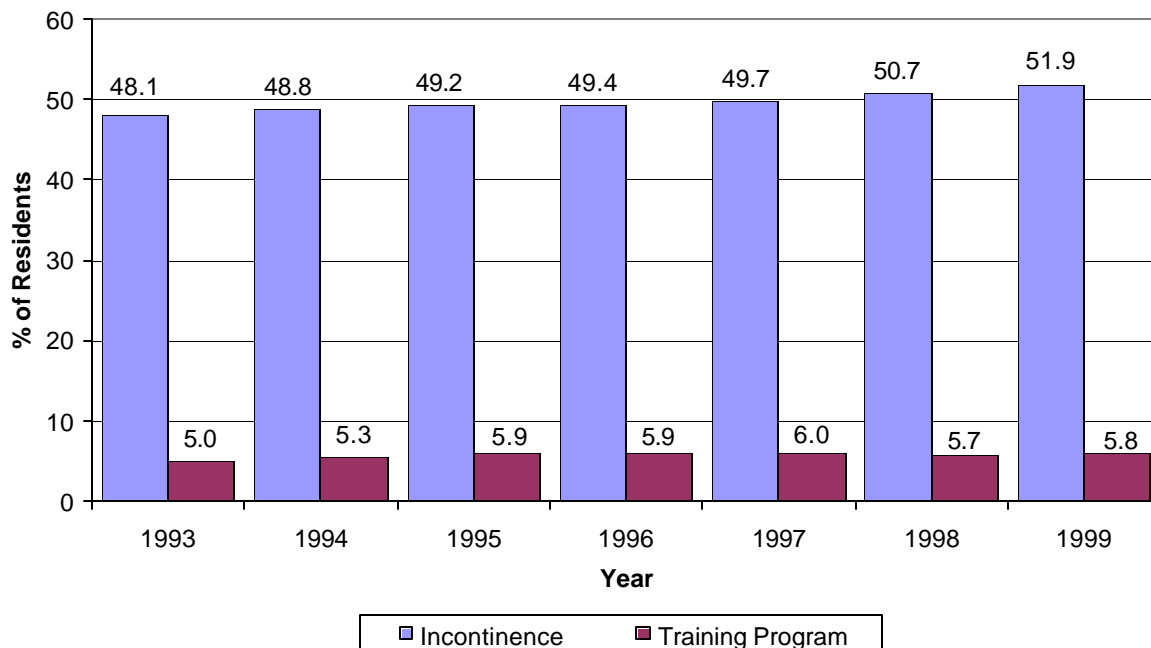


TABLE 22
PERCENT OF RESIDENTS
WITH BLADDER INCONTINENCE & IN BLADDER TRAINING PROGRAM

State	Bladder Incontinence							Bladder Training Program						
	1993	1994	1995	1996	1997	1998	1999	1993	1994	1995	1996	1997	1998	1999
AK	52.8	46.9	48.8	45.0	47.8	50.4	57.1	15.2	22.6	15.9	12.9	8.3	14.6	3.1
AL	50.9	52.1	52.1	52.2	53.0	55.5	54.6	5.6	4.4	7.8	10.4	10.7	12.4	12.6
AR	43.8	46.0	44.6	43.9	45.9	46.0	48.9	6.1	6.6	5.5	4.9	3.8	3.9	3.6
AZ	46.4	47.7	46.6	48.2	47.7	47.2	50.5	2.0	3.5	2.9	2.0	2.5	3.1	3.6
CA	50.2	49.3	49.5	49.9	49.1	49.9	51.2	2.6	2.9	3.4	3.3	3.4	3.1	3.4
CO	43.0	45.4	46.5	45.7	46.3	46.8	48.2	4.6	4.4	4.9	4.4	3.9	3.0	3.5
CT	51.6	50.2	50.7	50.0	50.5	51.0	53.1	2.4	3.5	5.2	5.2	3.9	4.7	4.4
DC	56.1	54.9	56.9	55.9	56.2	57.3	66.9	7.5	13.0	6.3	6.4	12.8	4.5	15.3
DE	52.3	55.2	54.4	54.7	53.5	55.7	55.3	2.9	1.7	3.1	8.8	10.8	11.7	12.5
FL	49.2	48.8	48.3	47.7	47.8	47.8	49.9	7.2	6.6	7.5	8.4	7.3	7.5	7.3
GA	48.6	48.1	49.7	49.7	50.8	52.8	55.1	2.7	4.5	6.1	5.3	4.7	4.4	4.1
HI	59.9	60.6	59.8	56.0	53.8	59.6	58.1	6.5	5.8	11.9	10.1	7.0	6.3	9.7
IA	44.4	45.2	46.3	47.6	49.0	49.5	50.8	7.7	7.1	6.5	4.7	3.8	4.4	3.2
ID	48.9	47.1	45.4	49.8	46.2	51.3	50.8	6.3	5.4	8.5	6.8	4.9	7.1	8.5
IL	40.6	40.5	41.3	40.5	41.0	42.2	43.5	6.3	5.9	5.2	5.5	5.1	3.7	4.3
IN	43.8	44.2	44.4	44.6	45.9	46.4	48.1	4.0	4.0	5.1	5.7	4.5	4.4	6.0
KS	43.3	44.1	46.0	45.0	47.6	48.6	49.7	5.0	6.8	6.6	7.4	6.9	7.0	5.7
KY	51.1	53.0	51.5	53.6	53.7	57.1	57.5	4.7	4.3	3.9	3.8	3.6	2.8	4.1
LA	32.6	33.6	35.5	37.3	38.4	40.4	39.8	4.8	4.9	3.9	3.7	3.5	2.9	3.4
MA	54.2	54.3	53.7	53.7	53.0	54.4	55.1	2.1	1.8	2.3	3.4	3.4	3.4	3.3
MD	56.8	57.2	56.3	55.0	54.7	55.9	58.6	7.4	8.2	9.0	8.6	9.6	8.0	7.4
ME	51.4	49.6	53.6	60.9	62.1	62.5	65.1	9.8	14.8	14.9	16.5	16.2	17.1	19.9
MI	51.3	52.3	52.8	52.8	52.5	53.0	53.0	6.4	7.3	7.3	6.7	8.0	8.8	9.1
MN	50.3	51.9	53.3	52.1	53.9	54.5	56.5	4.5	5.7	6.0	5.8	7.6	7.3	8.8
MO	46.2	47.4	46.7	47.2	47.5	48.8	49.2	5.1	5.2	6.9	5.7	6.0	5.4	5.4
MS	46.8	44.8	48.0	44.6	44.0	45.3	47.1	5.6	6.3	6.6	5.4	4.1	3.7	3.3
MT	48.6	44.4	47.5	46.7	47.0	48.0	50.7	5.8	5.6	7.3	9.7	8.8	8.2	7.3
NC	52.3	51.9	53.1	52.7	54.1	55.5	55.8	2.4	3.5	5.3	8.6	9.7	8.5	7.8
ND	44.3	44.8	46.2	49.0	48.6	52.1	53.5	3.0	2.9	3.9	3.6	2.7	2.5	4.9
NE	45.0	44.5	46.0	44.5	44.6	45.9	47.6	8.4	7.7	10.4	10.6	6.8	7.5	6.1
NH	48.2	48.7	48.1	47.6	49.5	51.5	51.9	10.2	12.4	13.2	9.1	9.8	8.5	8.5
NJ	53.4	51.7	51.9	53.2	51.4	51.2	52.5	3.7	4.0	3.7	4.4	3.9	3.8	4.7
NM	48.9	45.5	44.4	45.3	46.6	49.3	47.7	4.0	5.3	6.0	4.4	4.5	3.4	2.3
NV	42.9	50.5	49.5	49.7	41.4	49.3	51.5	5.4	4.9	4.1	4.4	2.3	6.0	4.2
NY	59.9	61.1	60.7	60.9	61.0	60.8	61.9	5.6	5.5	6.1	5.9	6.7	6.0	5.3
OH	45.8	48.2	48.1	48.6	48.2	50.3	51.2	7.2	8.6	10.1	9.6	13.5	12.5	9.7
OK	40.6	42.3	43.5	44.2	44.3	46.2	46.3	5.4	4.3	3.8	3.8	3.2	2.8	4.4
OR	58.2	55.4	56.5	56.1	56.8	57.7	58.6	4.4	5.2	6.2	3.6	4.3	2.7	4.5
PA	52.7	54.1	54.4	54.4	54.5	54.3	57.4	5.9	6.8	7.8	7.8	8.1	7.8	8.5
RI	45.7	47.3	49.3	48.5	46.7	48.1	50.1	6.2	5.2	7.1	6.3	5.4	8.1	6.2
SC	56.1	57.8	58.9	60.6	60.7	59.6	60.2	2.2	2.1	2.8	2.6	4.3	2.1	3.6
SD	45.6	45.2	48.9	45.6	46.3	48.9	50.6	9.1	13.2	12.3	9.2	16.9	11.0	7.2
TN	46.5	48.5	49.3	48.2	50.3	50.1	51.6	4.8	5.2	5.5	6.7	5.4	5.0	5.6
TX	45.0	46.8	46.4	47.2	48.0	48.3	49.9	1.8	1.6	1.6	1.4	1.2	1.5	2.4
UT	42.4	42.8	45.9	48.4	46.2	46.8	48.4	5.8	4.5	6.7	6.0	7.2	3.0	4.9
VA	57.8	59.0	60.5	62.2	62.0	63.9	65.2	5.8	6.0	6.9	8.5	7.3	7.5	7.2
VT	56.6	56.6	52.4	59.2	53.6	53.7	62.2	2.6	11.6	12.7	9.1	7.4	8.6	8.4
WA	42.7	45.1	54.8	57.2	55.6	58.0	57.7	4.8	4.3	6.0	6.6	4.6	3.6	2.9
WI	46.7	46.9	48.0	48.9	49.0	48.9	49.9	7.3	7.1	8.9	8.2	9.3	10.1	10.9
WV	49.1	52.1	44.5	34.8	34.4	32.5	37.7	6.8	8.1	6.5	2.1	3.2	1.3	1.7
WY	42.0	40.5	39.1	45.4	42.5	43.2	41.6	4.9	11.1	17.7	24.3	16.7	17.4	17.3
US	48.1	48.8	49.2	49.4	49.7	50.7	51.9	5.0	5.3	5.9	5.9	6.0	5.7	5.8

Bowel Incontinence and Bowel Training

Bowel incontinence more often than one time a week was also a common problem of nursing facility residents. The prevalence of this problem ranged from 42.0 percent in 1993 to 42.6 percent in 1999 in the U.S (Table 23). The percent varied from 25.7 percent in Wyoming to 57.8 percent in the Virginia in 1999.

Bowel training programs are also designed to assist residents to gain and maintain control through the use of diet, fluids, and regular schedules. In the 1993-1999 period, about 4 percent of residents in nursing facilities had such programs in the U.S (See Table 23). There was also a large discrepancy between the percent of residents with bowel incontinence and the percent of residents who were in training programs.

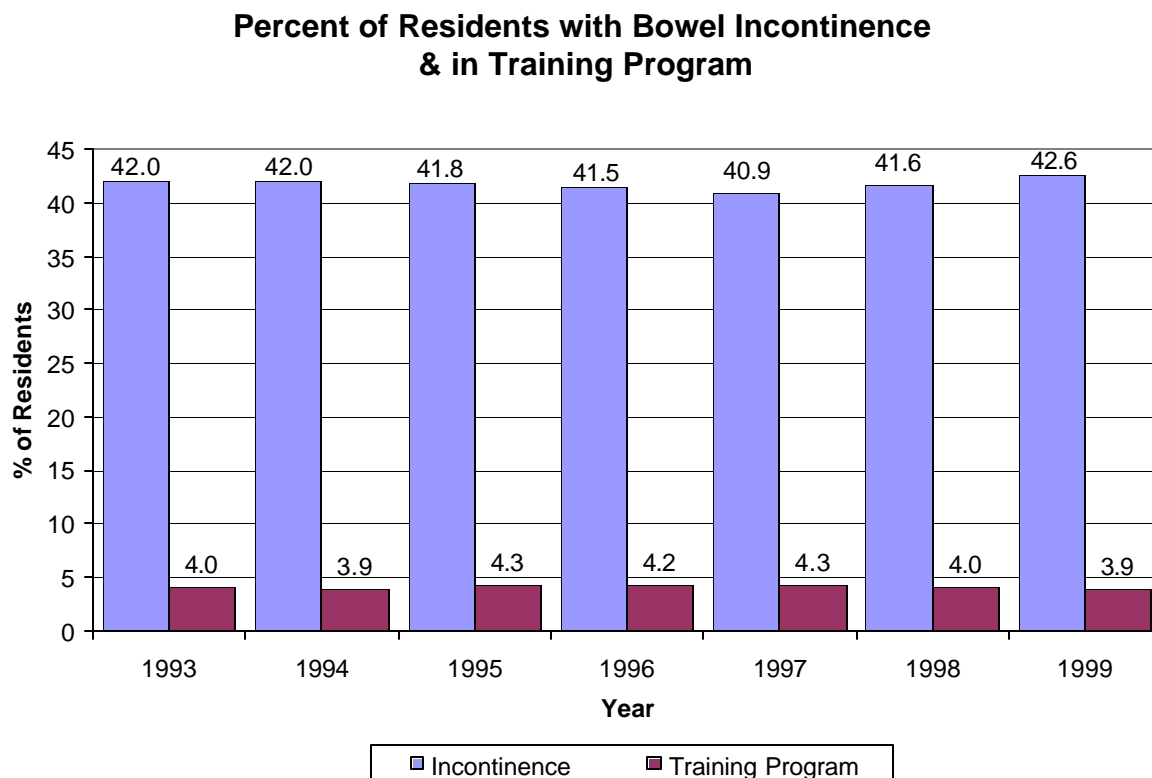


TABLE 23
PERCENT OF RESIDENTS
WITH BOWEL INCONTINENCE & IN BOWEL TRAINING PROGRAM

State	Bowel Incontinence							Bowel Training Program						
	1993	1994	1995	1996	1997	1998	1999	1993	1994	1995	1996	1997	1998	1999
AK	42.7	34.8	32.3	37.4	28.3	31.0	44.4	20.9	12.3	11.0	12.6	9.9	11.8	4.1
AL	50.2	52.4	49.7	47.7	48.9	49.6	49.9	4.7	3.3	5.1	7.6	7.8	8.4	8.2
AR	41.3	43.7	43.2	40.2	42.2	41.5	44.0	5.7	5.9	6.0	4.4	3.6	3.7	3.6
AZ	43.2	42.6	41.6	41.4	42.3	44.0	44.2	2.2	2.1	2.4	1.9	2.4	2.5	3.5
CA	46.6	44.5	45.0	45.4	43.4	44.9	46.2	2.0	2.5	2.7	2.5	2.7	2.3	2.3
CO	33.4	32.8	36.0	35.1	34.3	34.9	36.9	3.2	2.9	4.0	3.6	2.5	2.5	2.8
CT	43.2	41.7	39.3	41.2	39.7	39.8	40.2	1.9	2.3	3.9	2.9	2.6	2.7	1.8
DC	47.2	46.2	46.4	51.8	45.7	50.9	52.1	8.0	10.4	4.5	4.8	7.2	4.1	5.6
DE	43.1	47.2	45.4	46.3	45.9	44.5	46.9	3.2	2.5	3.0	7.2	8.3	6.7	8.1
FL	46.1	44.5	44.5	41.9	42.7	42.6	44.2	6.3	5.4	5.6	5.7	5.1	5.3	4.7
GA	47.1	45.2	47.0	45.9	46.0	47.6	50.2	2.2	2.9	4.1	4.1	3.9	2.7	2.9
HI	51.4	51.9	53.7	51.9	47.3	51.5	49.3	3.8	6.9	10.4	6.8	5.6	3.8	2.7
IA	30.0	29.0	28.8	29.5	29.7	29.1	30.0	4.9	4.2	4.3	3.5	3.3	3.5	2.7
ID	40.0	35.1	32.9	36.8	34.5	34.4	33.6	3.8	4.6	7.0	6.5	5.2	4.8	5.0
IL	33.2	33.3	32.7	31.7	30.8	31.0	32.1	3.8	3.5	3.0	3.0	2.6	2.4	2.9
IN	40.3	39.1	38.7	37.6	37.5	38.8	38.8	3.2	2.9	3.5	3.9	3.4	3.0	3.2
KS	33.1	33.9	35.3	32.5	33.3	33.9	35.4	3.9	5.0	4.3	4.9	4.8	4.5	3.9
KY	51.6	51.9	51.5	50.8	50.3	51.4	51.1	4.1	3.5	2.9	2.9	2.7	2.6	2.7
LA	33.8	35.0	35.1	37.3	39.1	40.0	40.8	4.1	4.2	3.2	3.0	2.5	2.4	2.7
MA	44.7	45.1	44.4	42.8	41.9	44.3	44.6	1.4	0.9	0.7	1.2	1.3	0.9	0.9
MD	49.8	49.9	49.1	48.0	47.8	46.9	51.3	6.7	8.1	6.8	7.4	8.3	5.8	4.8
ME	39.1	35.4	39.1	43.5	43.2	45.2	47.4	10.5	13.6	12.3	10.5	11.7	10.9	14.0
MI	43.0	41.1	41.6	41.4	39.0	39.5	40.1	4.8	5.1	5.0	4.6	5.1	6.3	5.3
MN	34.5	34.9	35.2	35.0	35.4	36.1	38.2	8.2	7.2	8.4	10.6	12.1	11.5	11.9
MO	41.7	41.9	40.2	39.9	39.2	40.5	40.6	3.8	4.2	5.2	4.5	5.2	3.7	3.8
MS	43.9	41.4	42.7	41.3	38.7	41.3	45.6	4.7	6.0	4.5	4.0	3.3	2.2	2.9
MT	31.9	30.5	29.8	31.0	29.7	29.2	32.4	4.8	4.1	5.8	6.7	6.9	8.0	5.0
NC	51.8	49.8	50.5	49.4	50.2	51.4	51.7	2.0	2.3	3.3	5.6	6.0	5.2	4.8
ND	29.2	27.0	31.5	28.3	28.4	30.8	30.5	1.9	2.2	2.9	2.9	2.8	2.6	2.9
NE	30.8	29.0	28.6	27.6	27.4	28.1	29.4	5.6	4.3	6.2	6.3	5.7	6.9	5.6
NH	34.0	32.8	29.3	30.2	29.4	31.3	31.6	4.6	6.8	6.6	8.7	8.3	4.6	7.6
NJ	46.9	44.7	44.4	45.3	43.9	43.6	44.2	3.3	3.1	3.0	2.9	3.0	3.0	3.7
NM	39.2	39.9	39.1	40.7	39.7	41.3	42.4	3.1	2.5	4.5	3.7	3.7	2.1	1.5
NV	40.5	42.3	45.5	46.0	37.7	46.0	46.1	6.1	3.0	4.1	2.0	2.0	2.2	3.4
NY	51.5	51.8	50.6	50.5	50.4	49.4	49.9	2.9	3.3	3.5	3.2	3.4	3.4	2.9
OH	39.8	40.1	39.7	39.2	37.8	39.3	39.7	4.4	5.0	5.2	5.0	6.4	5.0	4.5
OK	38.4	40.7	40.2	39.8	40.9	41.6	41.9	4.8	3.9	3.8	2.9	2.6	2.3	3.4
OR	50.4	47.2	46.6	45.8	45.5	47.0	49.3	4.3	5.1	6.8	3.1	4.2	2.6	3.6
PA	48.1	47.9	47.4	46.1	45.9	45.7	46.9	5.1	5.2	5.9	5.9	5.6	5.4	5.8
RI	37.2	38.8	38.7	36.3	33.3	34.0	34.7	3.9	4.1	3.8	2.7	3.4	4.3	3.1
SC	53.6	56.3	55.1	57.9	58.5	56.8	56.2	2.5	1.7	2.1	1.8	2.8	1.2	1.9
SD	28.9	27.3	27.8	25.0	26.8	28.2	32.2	6.4	8.5	6.7	5.4	8.9	6.2	7.5
TN	45.6	46.9	47.8	45.7	45.8	47.0	48.4	4.2	4.5	4.9	5.1	4.0	3.9	4.3
TX	46.0	46.4	46.2	46.4	45.9	45.5	47.2	1.5	1.4	1.1	1.1	0.9	0.9	1.4
UT	32.9	33.8	34.1	37.7	36.1	36.8	36.7	4.4	4.2	6.2	5.5	6.2	3.3	3.6
VA	54.6	55.7	56.7	58.1	57.0	58.4	57.8	5.2	5.5	6.7	7.8	6.9	7.2	6.4
VT	40.9	39.2	37.9	39.0	37.7	34.1	39.4	1.2	8.8	10.2	7.3	10.5	14.6	8.8
WA	29.5	30.2	39.3	42.8	40.0	43.8	45.5	3.2	3.7	4.7	5.0	5.5	4.1	2.3
WI	34.6	34.2	33.5	34.1	33.5	31.8	32.5	6.2	5.9	7.0	5.8	6.7	7.0	7.0
WV	46.2	48.7	42.3	28.3	27.4	23.0	30.3	0.9	1.1	1.0	1.3	2.1	1.2	1.0
WY	29.5	28.7	27.9	30.3	26.3	25.3	25.7	2.0	5.7	11.5	17.3	12.2	13.6	8.8
US	42.0	42.0	41.8	41.5	40.9	41.6	42.6	4.0	3.9	4.3	4.2	4.3	4.0	3.9

Catheters

Indwelling catheters are tubes used to drain the bladder. In 1993, about 8.1 percent of facility residents were reported using catheters and this declined to 7.5 percent in 1999 (See Table 24). The 1999 figure represents a decrease of 7.4 percent since 1993.

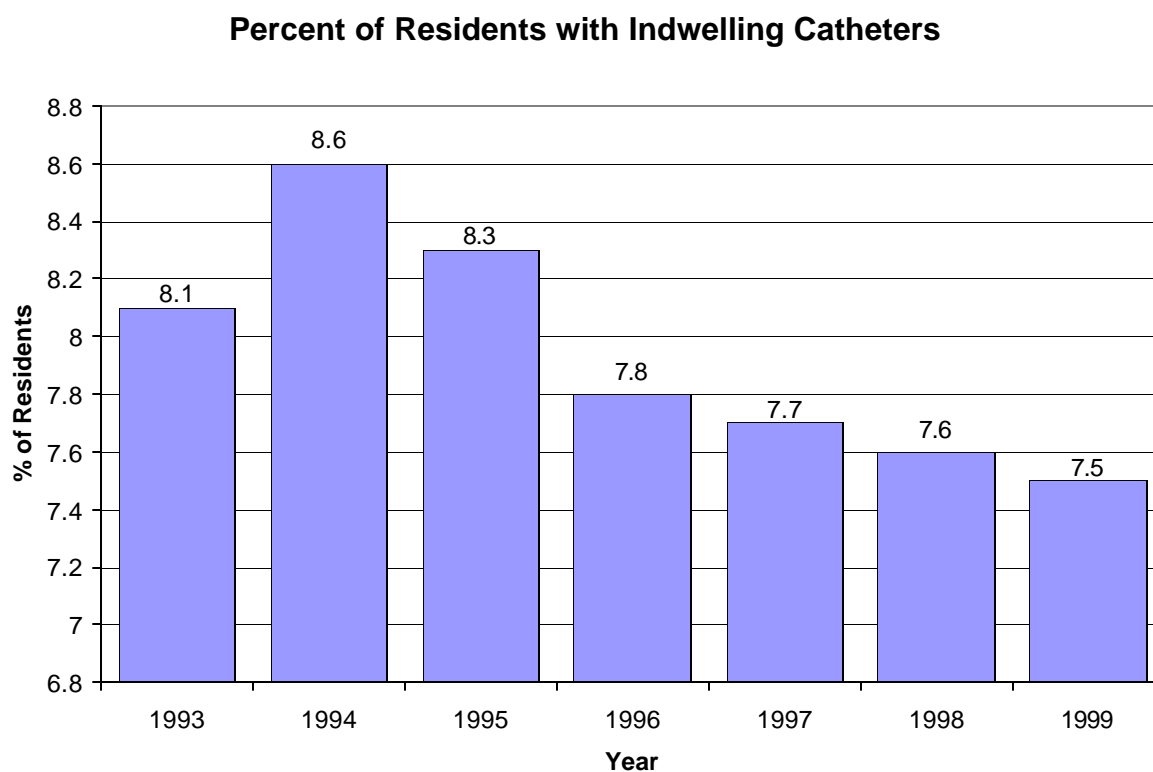


TABLE 24
PERCENTAGE OF RESIDENTS
WITH INDWELLING CATHETERS

State	1993	1994	1995	1996	1997	1998	1999
AK	8.4	6.0	6.1	7.2	7.4	12.0	9.7
AL	6.9	7.7	6.8	5.9	5.7	5.4	5.0
AR	10.5	9.8	9.8	9.0	9.5	9.4	10.2
AZ	8.5	11.2	10.0	9.9	10.8	10.9	9.4
CA	9.8	10.4	10.3	9.6	9.5	9.7	9.1
CO	7.0	7.3	7.7	6.9	7.5	8.1	8.2
CT	4.0	4.6	4.3	4.0	4.1	3.9	4.3
DC	4.4	6.6	9.9	7.9	8.3	6.5	5.4
DE	4.3	4.9	5.2	5.0	5.6	6.3	6.1
FL	8.5	8.6	8.7	8.1	8.0	8.0	7.6
GA	7.3	8.1	7.6	6.6	6.8	7.4	6.2
HI	5.9	6.2	5.6	6.2	5.8	4.0	4.8
IA	6.2	6.2	6.0	5.3	5.1	5.3	5.5
ID	6.7	5.9	8.8	7.1	8.3	7.0	7.2
IL	9.5	9.0	8.8	8.0	7.8	7.2	7.4
IN	10.9	10.7	10.3	9.3	8.7	8.4	8.5
KS	6.8	7.3	6.8	5.9	6.5	6.5	6.8
KY	12.5	12.4	13.1	10.9	10.4	10.9	10.6
LA	12.6	14.7	12.2	12.9	13.5	13.3	13.2
MA	4.5	5.4	5.0	4.6	4.9	5.1	5.0
MD	5.8	6.6	7.2	5.8	6.2	6.0	7.1
ME	5.1	5.6	5.1	5.9	6.3	6.8	7.1
MI	6.4	6.8	6.3	5.9	5.4	5.3	5.4
MN	4.5	4.8	4.6	4.5	4.4	4.2	4.1
MO	9.8	9.2	8.1	7.4	8.0	8.0	7.5
MS	7.8	8.1	8.0	8.0	8.6	8.9	8.1
MT	5.4	5.7	5.4	5.9	5.8	6.2	5.4
NC	8.4	8.7	8.2	7.0	6.8	7.1	6.5
ND	3.7	4.4	5.1	5.0	5.1	4.9	4.7
NE	5.3	5.5	5.5	5.5	5.5	5.3	6.2
NH	5.3	5.8	4.5	4.4	4.7	4.3	5.0
NJ	5.9	6.4	5.9	5.4	5.8	5.6	6.3
NM	7.7	8.7	9.4	9.6	8.1	7.5	6.9
NV	8.0	10.6	10.4	11.4	9.9	8.4	9.6
NY	4.4	5.0	4.7	4.7	4.9	5.0	4.8
OH	8.0	8.0	7.7	7.6	7.5	7.3	7.2
OK	10.6	10.4	10.2	9.8	10.4	10.4	10.2
OR	7.4	7.3	7.3	7.8	7.0	7.6	7.3
PA	9.1	9.5	8.9	8.0	7.8	8.0	7.3
RI	5.8	6.0	5.4	4.1	4.0	4.6	4.5
SC	6.5	7.4	6.9	6.1	6.9	6.0	6.4
SD	5.0	5.4	5.5	5.2	5.6	4.7	5.0
TN	10.5	11.6	9.8	9.9	9.1	9.4	8.4
TX	12.8	13.6	13.1	12.6	11.5	10.9	10.4
UT	7.6	8.4	7.6	7.5	7.8	7.9	9.1
VA	9.5	9.4	9.4	8.2	8.3	8.4	7.6
VT	5.6	7.0	4.8	5.1	5.1	5.8	6.4
WA	6.5	6.8	6.5	7.3	8.0	7.9	8.6
WI	6.0	6.5	6.3	6.0	6.0	5.8	5.8
WV	9.8	9.3	10.4	8.6	9.5	8.1	9.6
WY	9.4	8.7	7.9	5.1	8.6	7.8	8.7
US	8.1	8.6	8.3	7.8	7.7	7.6	7.5

STAFFING LEVELS

Background

There is agreement that there is a strong relationship between resident characteristics, nurse staffing time requirements, and nursing costs in nursing homes. Numerous studies have examined these relationships and it is this relationship which serves as the basis for the casemix reimbursement systems used in some states (Fries and Cooney, 1985; Schneider et al., 1988; Fries et al., 1989; 1994).

Not surprisingly, higher staffing levels in nursing homes have been associated with higher quality of care. One of the early studies which documented this relationship found that homes with more RN hours per patients were associated with patients being alive, having improved physically, and being discharged to home (Linn et al., 1977). Fottler, Smith and James (1981) also found nursing hours to be a positive indicator of quality. Nyman (1988b) found that higher nursing hours per resident were significantly and positively associated with three of eight quality measures in Iowa nursing homes. Spector and Takada (1991) examined nursing homes in Rhode Island and found that low staffing in homes with very dependent residents was associated with reduced likelihood of improvement. Cohen and Spector (1996) also had similar findings about the importance of RN staffing. Harrington and colleagues

(2000b) found a relationship between more RNs and fewer deficiencies.

The evidence from these studies recently led the Institute of Medicine Committee on Nurse Staff in Hospitals and Nursing Homes (1996) to conclude that the preponderance of evidence from a number of studies with different types of quality measures shows a positive relationship between nursing staffing and quality of nursing home care. Because of the low staffing levels and poor quality of care in some facilities, the IOM Committee (1996) recommended that higher staffing levels are needed in nursing facilities.

Recent reports recommend that minimum staffing levels are needed to ensure quality of care (Harrington et al., 2000a; HCFA, 2000). An expert panel recommended minimum staffing levels of 4.55 hours per patient day, (Harrington et al., 2000a) including all RNs, LVNs, and nursing assistants.

The level of registered nurse staffing is a growing concern for quality of care because of controls on Medicaid and Medicare reimbursement rates may have negative effects on staffing levels (Kanda and Mezey, 1991; Swan et al., 2000).

Nursing personnel in nursing facilities were of particular interest for this report.

Nursing personnel included: registered nurses (RNs); licensed practical/vocational nurses (LPN/LVNs), and nursing aides/orderlies/ assistants (NAs). Staffing hours (including full-time, part-time, and contract staff) are reported by facilities as total hours worked in a fourteen day period. Nursing personnel hours are examined for each of the above three categories separately, for all licensed nursing personnel (RNs and LPN/LVNs combined), and for total nursing personnel (RNs, LPN/LVNs, and NAs). The staff time includes all administrative and direct care time.

To compute the staffing ratios for this report, the total number of staffing payroll hours reported in a two week period was divided by the total number of residents and by the 14 days in the reporting period. In examining the staffing data, there were some facilities that reported very high or low levels of staffing. In order to minimize the number of facilities which may have reported erroneous data, we developed standard rules to remove these facilities from the data set. A conservative approach was taken by eliminating the lower one percent of facilities and the upper 2 percent after eliminating facilities with extreme outliers. For the details of the data cleaning process, see the technical notes in the appendix.

Nursing facilities are required by regulation to meet minimum nursing standards. Facilities must have sufficient nursing staff to provide nursing and related services to attain or maintain the highest practicable physical, mental, and psychosocial well-

being of residents. Facilities must also provide sufficient numbers of licensed nursing personnel to provide care on a 24 hour basis to all residents in accordance with resident care plans.

Facilities must also use the services of a registered nurse for at least 8 consecutive hours a day, 7 days a week, except when they have been given a waiver. A Medicare only skilled nursing facility may have a waiver if it is located in a rural area and has one registered nurse who is on duty 40 hours a week.

Waivers may be granted under certain conditions where there is a shortage of appropriate personnel and where the health and safety of individuals is not jeopardized.

For this report, the total hours of staffing per resident day were examined separately for Medicaid only (Title 19) and/or dually certified facilities (Title 18/19) and for Medicare only facilities (Title 18). The two types of facilities are examined separately because Title 18 facilities have traditionally had higher staffing ratios. Many Title 18 certified facilities are located in hospitals and have residents with higher acuity levels and such facilities usually have more RNs to provide care.

It should be noted that the reported staffing ratios reflect payroll hours per resident day and not the actual hours of care delivered directly to residents. These data are reported by each facility for the two weeks prior to the facility survey.

Facilities with Medicaid Only and Medicare and/or Medicaid Beds (Title 19 and Title 18/19)

Tables 25 and 26 show the total facilities with Medicaid-only and Medicare/Medicaid beds in the U.S. for the 1993 through 1999 period. The number of facilities varied by year and category because of some missing or erroneous data which were cleaned, using consistent procedures over the time period. There were 12,198 facilities with beds in this category for RNs in 1999.

Registered Nursing Hours

The average RN hours per resident day are shown in Table 25. The average hours were 0.3 in 1993 and 0.6 in 1999. This converts to 36 minutes per resident day or about 12 minutes per 8 hour shift in the 1999 period. The average ratio of RNs hours varied across states from 0.2 hours (in Louisiana) to 1.3 hours (in Alaska) in 1999. This includes nurses who are in administrative positions.

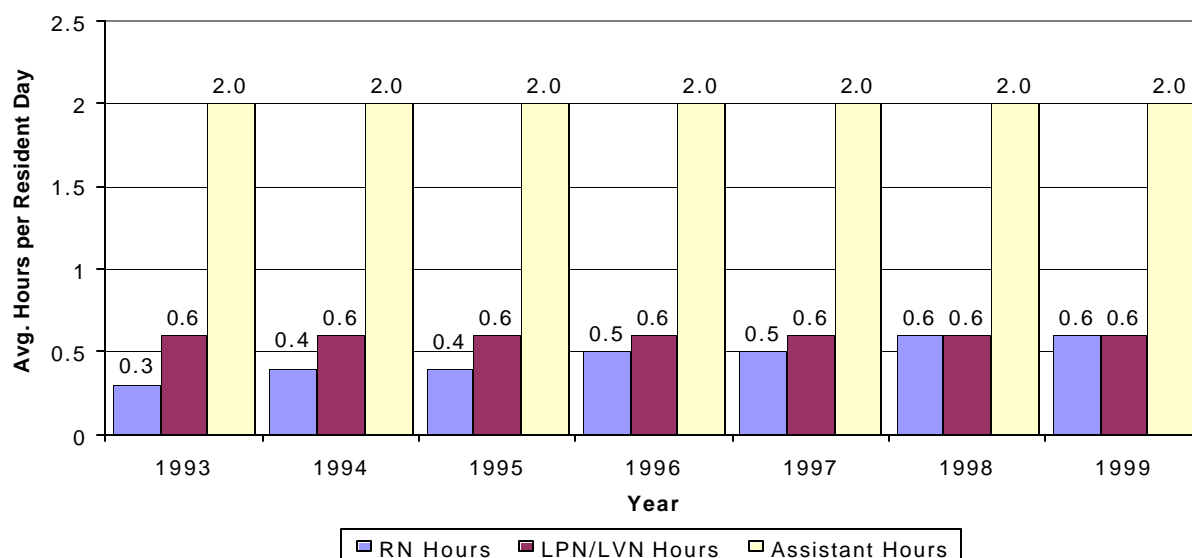
LPN/LVN Nursing Hours

The average LPN/LVN hours per resident day are shown in Table 25. There was an average of 0.6 hours (36 minutes) per resident day (or 12 minutes per shift) in 1993-1999. These data showed no change over the period.

Nursing Aide/Assistant Hours

The average NA hours per resident day are shown in Table 25. The average was 2.0 hours (120 minutes) in the 1993-1999 period. This is 40 minutes per 8 hour shift.

Avg. Nursing Hours per Resident Day for Facilities with Medicaid and Medicare/Medicaid Beds



Nursing Facilities, Staffing, Residents and Facility Deficiencies, 1993-1999

Department of Social & Behavioral Sciences

University of California San Francisco

TABLE 25
AVERAGE RN, LPN/LVN, AND ASSISTANT HOURS PER RESIDENT DAY
IN FACILITIES WITH MEDICAID AND WITH MEDICARE/MEDICAID BEDS (TITLE 19 AND TITLE 18/19)

State	RN Hours							LPN/LVN Hours							Assistant Hours						
	1993	1994	1995	1996	1997	1998	1999	1993	1994	1995	1996	1997	1998	1999	1993	1994	1995	1996	1997	1998	1999
AK	0.7	0.9	0.9	1.1	1.1	1.2	1.3	0.7	0.8	0.7	0.6	0.6	0.6	0.6	2.6	2.9	3.0	3.0	2.8	2.8	2.9
AL	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.8	0.9	0.9	0.9	0.9	0.9	0.9	2.5	2.4	2.4	2.5	2.4	2.5	2.5
AR	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.6	0.6	0.6	0.6	0.7	0.7	0.7	1.9	1.9	1.9	1.9	1.9	1.9	1.9
AZ	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.8	0.7	0.6	0.7	0.7	0.7	0.7	2.0	2.1	2.0	2.0	2.0	2.0	2.0
CA	0.3	0.4	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	2.0	2.1	2.0	2.1	2.1	2.1	2.1
CO	0.4	0.6	0.6	0.6	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.9	1.9	1.9	1.9	2.0	2.0	2.0
CT	0.5	0.6	0.6	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.4	0.5	0.5	0.5	1.8	1.9	1.8	2.0	2.0	2.1	2.1
DC	0.5	0.6	0.5	0.8	0.8	0.6	0.7	0.7	0.8	0.7	0.7	0.8	0.9	0.8	2.1	2.4	2.4	2.4	2.4	2.5	2.5
DE	0.5	0.7	0.8	0.8	0.9	0.8	0.9	0.6	0.6	0.6	0.6	0.6	0.5	0.6	2.2	2.1	2.2	2.2	2.0	2.3	2.1
FL	0.3	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	2.0	1.9	2.0	2.0	2.0	1.9	2.0
GA	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.7	0.7	0.7	0.8	0.8	0.8	0.8	2.0	2.0	2.0	2.0	2.0	2.0	2.0
HI	0.7	0.7	0.7	0.7	0.7	0.9	1.0	0.5	0.6	0.6	0.5	0.6	0.5	0.6	2.2	2.5	2.4	2.2	2.4	2.2	2.4
IA	0.3	0.4	0.4	0.5	0.5	0.6	0.6	0.4	0.4	0.4	0.5	0.4	0.5	0.5	1.8	1.8	1.8	1.8	1.8	1.7	1.8
ID	0.4	0.6	0.6	0.6	0.7	0.7	0.6	0.7	0.6	0.6	0.7	0.7	0.6	0.5	2.5	2.5	2.5	2.5	2.4	2.3	1.9
IL	0.3	0.4	0.4	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	1.7	1.7	1.7	1.6	1.6	1.6	1.6
IN	0.2	0.3	0.4	0.4	0.5	0.5	0.5	0.7	0.7	0.7	0.7	0.8	0.8	0.7	1.9	1.7	1.7	1.7	1.6	1.6	1.6
KS	0.3	0.4	0.4	0.4	0.5	0.5	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.5	1.8	1.8	1.8	1.9	1.9	1.9	1.9
KY	0.3	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.7	0.7	0.6	0.7	0.7	0.7	2.3	2.2	2.1	2.2	2.2	2.3	2.2
LA	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.6	0.6	0.6	0.6	0.6	0.7	0.7	1.9	1.5	1.4	1.9	1.9	1.9	1.8
MA	0.4	0.5	0.6	0.7	0.7	0.8	0.7	0.5	0.6	0.6	0.6	0.5	0.6	0.6	2.0	2.1	2.1	2.2	2.1	2.2	2.2
MD	0.3	0.4	0.5	0.5	0.6	0.7	0.7	0.5	0.6	0.5	0.5	0.5	0.6	0.6	2.0	2.1	2.0	2.1	2.0	2.2	2.2
ME	0.4	0.6	0.7	0.8	0.8	0.9	0.8	0.5	0.4	0.5	0.4	0.4	0.4	0.4	2.5	2.5	2.7	2.6	2.7	2.7	2.6
MI	0.3	0.4	0.4	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	2.2	2.2	2.2	2.2	2.2	2.2	2.2
MN	0.3	0.4	0.4	0.5	0.5	0.6	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.7	1.9	1.9	1.9	1.9	2.0	1.9	1.9
MO	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.6	0.6	0.6	0.6	0.6	0.6	2.1	2.0	2.1	2.1	2.1	2.1	2.2
MS	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.7	0.7	0.7	0.7	0.7	0.8	0.8	1.9	2.0	2.0	2.0	2.0	2.0	2.0
MT	0.5	0.6	0.6	0.7	0.7	0.7	0.8	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2.2	2.2	2.2	2.2	2.2	2.3	2.3
NC	0.4	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	2.3	2.2	2.2	2.2	2.2	2.2	2.2
ND	0.3	0.4	0.4	0.5	0.5	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2.0	2.2	2.2	2.3	2.3	2.3	2.4
NE	0.3	0.4	0.4	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.9	1.8	1.9	1.8	1.9	1.9	2.0
NH	0.5	0.7	0.7	0.7	0.8	0.8	0.9	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2.1	2.3	2.3	2.1	2.2	2.1	2.1
NJ	0.4	0.6	0.6	0.6	0.7	0.7	0.7	0.5	0.5	0.5	0.5	0.5	0.5	0.6	2.0	2.1	2.1	2.0	2.1	2.1	2.1
NM	0.3	0.4	0.4	0.5	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	2.0	2.0	2.1	2.1	1.9	2.1	2.2
NV	0.8	1.0	0.8	0.9	0.9	1.0	0.7	0.9	0.9	0.9	0.9	0.8	0.6	0.7	2.3	2.0	2.1	2.2	2.4	2.2	2.1
NY	0.4	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	2.0	2.0	2.0	2.0	2.0	2.0	2.1
OH	0.3	0.4	0.5	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	2.1	2.1	2.0	2.1	2.1	2.1	2.1
OK	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.5	0.5	0.5	0.5	0.5	0.5	0.6	1.8	1.8	1.9	2.0	2.0	2.0	2.0
OR	0.5	0.6	0.6	0.7	0.8	0.7	0.7	0.4	0.4	0.4	0.4	0.4	0.4	0.4	2.2	2.3	2.2	2.3	2.3	2.3	2.3
PA	0.4	0.6	0.6	0.6	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.7	0.7	2.0	2.0	2.0	2.0	2.0	2.1	2.1
RI	0.5	0.5	0.5	0.6	0.7	0.7	0.7	0.4	0.3	0.3	0.3	0.3	0.3	0.3	1.9	2.0	2.0	2.0	2.1	2.0	1.9
SC	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.7	0.8	0.7	0.8	0.8	0.7	0.8	2.1	2.2	2.1	2.1	2.1	2.0	2.1
SD	0.4	0.6	0.6	0.6	0.7	0.7	0.7	0.3	0.3	0.3	0.3	0.3	0.3	0.3	1.8	1.9	1.9	2.0	2.0	2.0	2.0
TN	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.6	0.7	0.7	0.7	0.7	0.7	0.7	1.8	1.8	1.8	1.8	1.9	1.8	1.8
TX	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.7	0.7	0.7	0.6	0.7	0.7	0.7	1.8	1.9	1.9	1.9	1.9	1.9	1.9
UT	0.2	0.3	0.4	0.5	0.6	0.4	0.6	0.6	0.6	0.5	0.6	0.5	0.5	0.6	1.8	1.8	1.7	1.8	1.6	2.0	2.0
VA	0.3	0.4	0.4	0.5	0.5	0.5	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.8	1.9	2.0	1.9	1.9	2.0	1.9	1.9
VT	0.4	0.5	0.4	0.5	0.6	0.6	0.6	0.7	0.8	0.6	0.6	0.6	0.7	0.7	2.1	1.9	1.9	2.1	2.1	2.3	2.3
WA	0.5	0.7	0.7	0.8	0.9	0.9	0.9	0.5	0.5	0.5	0.5	0.6	0.6	0.6	2.2	2.2	2.2	2.3	2.4	2.4	2.3
WI	0.4	0.6	0.6	0.6	0.7	0.7	0.7	0.4	0.4	0.4	0.4	0.4	0.4	0.4	2.1	2.1	2.1	2.1	2.2	2.1	2.1
WV	0.2	0.3	0.4	0.4	0.4	0.4	0.5	0.7	0.7	0.7	0.7	0.7	0.7	0.8	2.0	2.2	2.2	2.1	2.1	2.1	2.1
WY	0.4	0.6	0.6	0.7	0.7	0.8	0.7	0.5	0.5	0.5	0.4	0.5	0.5	0.4	2.1	2.1	2.1	2.2	2.2	2.2	2.1
US	0.3	0.4	0.4	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Facilities	12132	12724	12623	12852	12701	12445	12198	12105	12730	12631	12875	12735	12464	12209	12083	12708	12612	12853	12708	12448	12195

Nursing Facilities, Staffing, Residents and Facility Deficiencies, 1993-1999
Department of Social & Behavioral Sciences
University of California San Francisco

Licensed Nursing Hours

Table 26 shows the average licensed nursing hours (RNs and LPN/LVNs) per resident day was 0.9 to 1.2 hours in 1993-1999. This was about 72 minutes per resident day or 24 minutes per 8 hour shift in 1999.

Total Nursing Hours

The total nursing hours (RNs, LPN/LVNs, and NAs) per resident day was 2.9 to 3.2 in 1993-1999 (See Table 26). The total nursing hours varied across states from 2.6 in Illinois to 4.5 in Alaska in 1999.

**Total Nursing Hours per Resident Day in Facilities
with Medicaid and Medicare/Medicaid Beds**

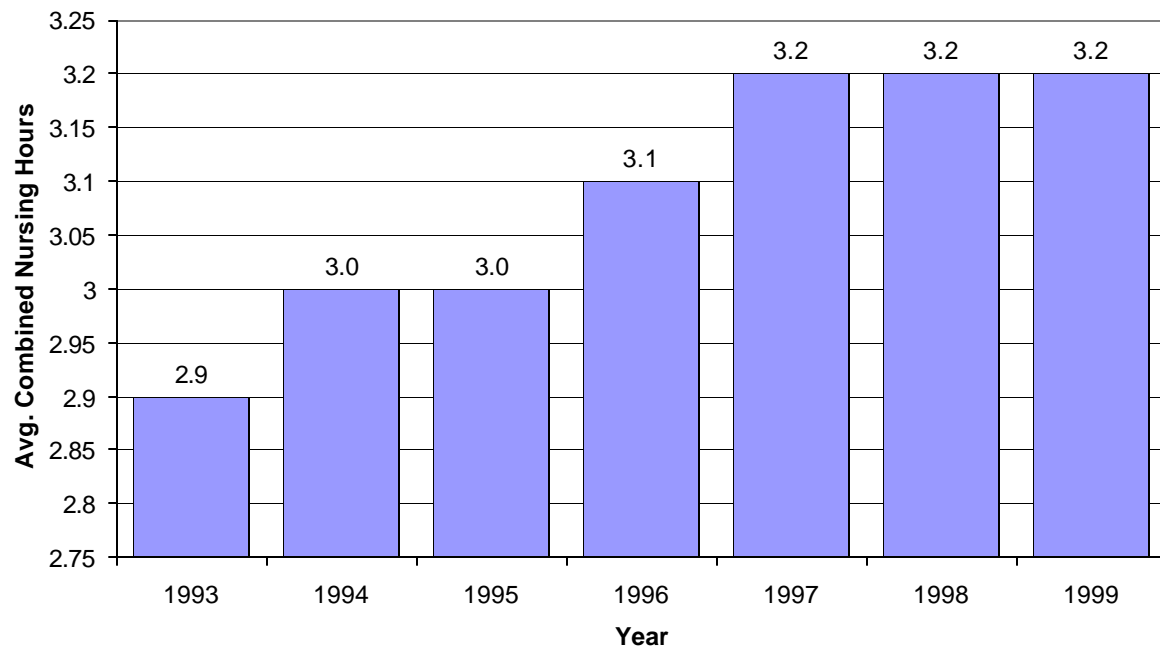


TABLE 26
AVERAGE LICENSED AND COMBINED NURSE HOURS PER RESIDENT DAY
IN FACILITIES WITH MEDICAID AND MEDICARE/MEDICAID BEDS (TITLE 19 AND TITLE 18/19)

State	Licensed Nurses							Total Nursing Staff						
	1993	1994	1995	1996	1997	1998	1999	1993	1994	1995	1996	1997	1998	1999
AK	1.6	1.7	1.7	1.8	1.7	1.9	2.0	4.5	4.6	4.7	4.6	4.5	4.6	4.5
AL	1.0	1.2	1.2	1.2	1.3	1.3	1.3	3.5	3.7	3.5	3.7	3.8	3.9	3.8
AR	0.7	0.8	0.8	0.8	0.9	0.9	0.9	2.6	2.7	2.7	2.7	2.8	2.9	2.9
AZ	1.4	1.2	1.2	1.2	1.3	1.4	1.4	3.4	3.4	3.3	3.3	3.3	3.4	3.4
CA	0.9	1.0	1.0	1.1	1.2	1.2	1.1	3.0	3.1	3.1	3.2	3.3	3.3	3.2
CO	1.0	1.2	1.2	1.2	1.3	1.3	1.3	2.9	3.1	3.1	3.1	3.2	3.3	3.3
CT	1.0	1.1	1.0	1.1	1.2	1.2	1.2	2.8	3.0	2.9	3.1	3.3	3.3	3.4
DC	1.2	1.4	1.2	1.5	1.6	1.5	1.5	3.5	3.9	3.5	3.9	3.8	3.8	4.0
DE	1.1	1.3	1.4	1.3	1.5	1.4	1.4	3.3	3.4	3.5	3.4	3.4	3.7	3.7
FL	1.0	1.1	1.1	1.2	1.2	1.3	1.3	3.0	3.1	3.1	3.2	3.2	3.2	3.3
GA	0.9	1.0	1.0	1.0	1.1	1.1	1.1	2.9	3.0	3.0	3.1	3.1	3.1	3.1
HI	1.1	1.2	1.1	1.2	1.3	1.4	1.3	3.3	3.6	3.5	3.6	3.7	3.8	4.0
IA	0.7	0.8	0.9	0.9	1.0	1.0	1.0	2.5	2.6	2.6	2.7	2.7	2.8	2.9
ID	1.1	1.2	1.2	1.3	1.4	1.4	1.4	3.6	3.7	3.7	3.8	3.8	3.9	3.9
IL	0.8	0.9	0.9	0.9	1.0	1.0	1.0	2.5	2.5	2.5	2.6	2.6	2.6	2.6
IN	0.9	1.1	1.1	1.2	1.2	1.2	1.2	2.8	2.7	2.8	2.8	2.9	2.9	2.9
KS	0.7	0.8	0.8	0.9	1.0	1.0	1.0	2.5	2.6	2.7	2.8	2.8	2.9	2.9
KY	0.9	1.0	1.0	1.0	1.1	1.1	1.2	3.2	3.2	3.1	3.2	3.4	3.4	3.4
LA	0.7	0.8	0.8	0.8	0.9	0.9	0.9	2.6	2.5	2.4	2.7	2.8	2.8	2.8
MA	1.0	1.1	1.1	1.2	1.3	1.4	1.3	3.0	3.2	3.2	3.4	3.4	3.5	3.5
MD	0.8	1.0	1.0	1.1	1.1	1.3	1.3	2.9	3.1	3.1	3.3	3.2	3.4	3.4
ME	0.9	1.0	1.2	1.1	1.2	1.3	1.3	3.5	3.6	3.9	3.7	3.9	4.0	4.0
MI	0.9	1.0	1.0	1.1	1.1	1.2	1.2	3.1	3.3	3.3	3.4	3.4	3.4	3.4
MN	0.9	1.0	1.1	1.1	1.2	1.2	1.2	2.9	3.0	3.0	3.1	3.2	3.1	3.2
MO	0.7	0.9	0.9	0.9	1.0	1.0	1.0	2.8	2.9	2.9	3.0	3.1	3.1	3.2
MS	0.9	1.0	1.0	1.0	1.1	1.2	1.2	2.8	3.0	2.9	3.0	3.2	3.3	3.2
MT	1.0	1.1	1.1	1.2	1.3	1.3	1.3	3.2	3.4	3.3	3.4	3.5	3.6	3.5
NC	1.1	1.2	1.2	1.3	1.3	1.4	1.4	3.3	3.5	3.4	3.4	3.5	3.6	3.6
ND	0.8	0.9	0.9	1.0	1.0	1.1	1.1	3.0	3.2	3.2	3.3	3.4	3.4	3.5
NE	0.8	1.0	1.0	1.1	1.1	1.2	1.2	2.7	2.8	2.9	2.9	3.0	3.1	3.2
NH	1.0	1.2	1.2	1.2	1.3	1.3	1.4	3.1	3.5	3.4	3.2	3.5	3.4	3.5
NJ	1.0	1.1	1.1	1.1	1.2	1.2	1.3	3.0	3.1	3.1	3.2	3.3	3.3	3.4
NM	0.8	0.9	0.9	0.9	1.0	1.1	1.1	2.9	2.9	2.8	3.0	3.0	3.2	3.3
NV	1.6	1.6	1.6	1.7	1.6	1.6	1.4	3.9	3.5	3.6	3.8	4.1	3.8	3.5
NY	1.1	1.1	1.1	1.1	1.2	1.2	1.2	3.1	3.1	3.0	3.1	3.2	3.3	3.3
OH	1.0	1.2	1.2	1.3	1.3	1.4	1.4	3.1	3.2	3.2	3.4	3.4	3.4	3.5
OK	0.6	0.7	0.7	0.7	0.8	0.8	0.9	2.5	2.5	2.6	2.8	2.8	2.8	2.8
OR	0.9	1.0	1.0	1.0	1.1	1.1	1.1	3.1	3.3	3.2	3.4	3.4	3.4	3.4
PA	1.0	1.2	1.2	1.2	1.3	1.3	1.4	3.1	3.2	3.2	3.3	3.4	3.4	3.4
RI	0.9	0.9	0.9	1.0	1.0	1.0	1.1	2.9	2.9	2.9	3.0	3.1	3.0	3.0
SC	1.0	1.1	1.1	1.1	1.2	1.2	1.2	3.1	3.3	3.2	3.2	3.3	3.3	3.4
SD	0.7	0.9	0.9	1.0	1.0	1.1	1.1	2.6	2.8	2.8	3.0	3.1	3.1	3.0
TN	0.8	0.9	0.9	1.0	1.0	1.1	1.1	2.6	2.8	2.8	2.9	2.9	2.9	3.0
TX	0.8	0.8	0.9	0.9	1.0	1.0	1.0	2.6	2.7	2.8	2.8	2.9	3.0	3.0
UT	0.9	0.9	1.0	1.1	1.0	1.0	1.1	2.7	2.7	2.7	2.9	2.7	3.1	3.1
VA	1.0	1.1	1.1	1.2	1.2	1.2	1.3	3.0	3.1	3.0	3.1	3.2	3.2	3.2
VT	1.0	1.3	1.1	1.2	1.2	1.4	1.3	3.1	3.4	3.2	3.3	3.4	3.7	3.6
WA	1.1	1.2	1.3	1.3	1.4	1.5	1.5	3.3	3.5	3.6	3.7	3.9	3.9	3.8
WI	0.9	1.0	1.0	1.0	1.1	1.1	1.1	3.0	3.1	3.1	3.2	3.2	3.2	3.3
WV	0.9	1.0	1.1	1.1	1.1	1.1	1.2	2.9	3.2	3.3	3.2	3.2	3.2	3.3
WY	0.9	1.1	1.2	1.1	1.2	1.2	1.2	3.0	3.2	3.3	3.2	3.5	3.4	3.4
US	0.9	1.0	1.0	1.1	1.1	1.2	1.2	2.9	3.0	3.0	3.1	3.2	3.2	3.2
Facilities	11,865	12,436	12,317	12,539	12,403	12,142	11,885	11,740	12,299	12,172	12,395	12,243	11,996	11,735

Facilities With Medicare Only Certified Beds (Title 18)

Tables 27 and 28 show the certified facilities with Medicare only beds. In 1998 there were a total of 1,704 such facilities which had RN staffing data available. Medicare only certified nursing facility beds represented only 3.6 percent of the total nursing facility beds (Table 5).

Registered Nursing Hours

The average RN hours per resident day are shown in Table 27. The average RN hours were 1.4 in 1993. The ratio increased up to 2.2 hours per resident day (or 132 minutes) in 1998 and 2.0 (or 120 minutes) in 1999. The ratio of RNs hours varied across states.

LPN/LVN Nursing Hours

The average LPN/LVN hours per resident day are shown in Table 27. There was an average of 1.5 hours per resident day in 1993 and this decreased to 1.2 in 1999. This was about 72 minutes per resident day or 24 minutes per shift in 1999.

Nursing Aide/Assistant Hours

The average NA hours per resident day are shown in Table 27. The average was 2.7 hours in 1993 and this declined to 2.4 hours in 1999.

**Average Nursing Hours per Resident Day
in Medicare-Only Facilities**

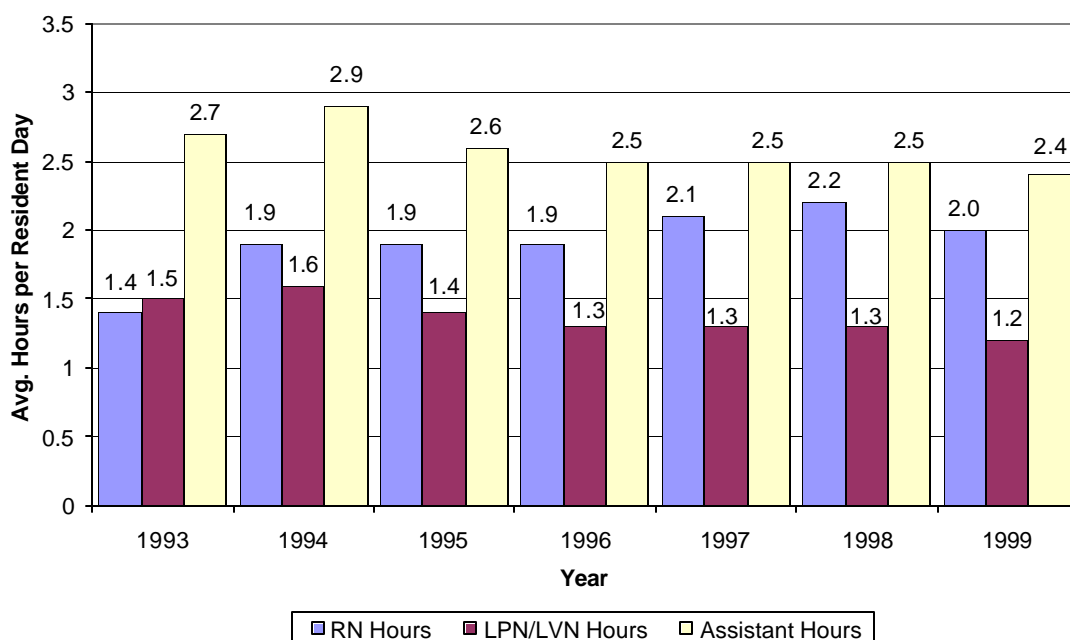


TABLE 27
AVERAGE RN, LPN/LVN, AND ASSISTANT HOURS PER RESIDENT DAY
IN FACILITIES WITH MEDICARE ONLY BEDS (TITLE 18)

RN Hours								LPN/LVN Hours								Assistant Hours							
State	1993	1994	1995	1996	1997	1998	1999	1993	1994	1995	1996	1997	1998	1999	1993	1994	1995	1996	1997	1998	1999		
AK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.1	0.0	0.0	0.0	0.0	0.0	0.0	3.4	0.0	0.0		
AL	0.7	2.2	1.5	1.3	1.8	1.6	2.6	1.5	1.8	1.8	1.3	1.2	1.8	1.1	2.9	3.2	3.0	2.4	2.7	3.1	3.0		
AR	2.0	2.4	2.3	1.7	2.0	1.8	2.1	2.5	2.1	1.8	1.5	1.9	1.5	2.0	2.6	2.4	2.0	2.2	2.2	2.5	2.5		
AZ	0.8	2.4	1.1	2.1	2.8	2.4	3.3	0.8	2.1	1.1	0.9	1.0	0.8	1.0	2.4	3.8	2.6	1.7	2.6	3.3	3.0		
CA	1.1	1.8	2.0	1.7	2.1	2.1	2.0	0.9	1.0	1.1	0.9	1.0	1.0	0.9	2.6	3.1	2.9	2.6	2.7	2.8	2.6		
CO	1.8	3.3	1.9	1.9	2.9	2.2	2.3	2.1	2.2	1.1	1.1	1.1	1.0	1.1	2.8	3.6	2.2	2.2	2.2	2.2	2.1		
CT	0.9	1.0	1.2	1.4	1.1	1.1	1.5	0.5	0.5	0.5	1.1	0.4	0.4	0.4	2.4	2.6	2.5	2.2	2.3	2.5	2.7		
DC	0.0	0.6	0.0	0.4	0.6	0.5	0.6	0.0	0.6	0.0	0.7	0.8	0.9	1.0	0.0	2.8	0.0	2.1	2.2	2.4	2.8		
DE	0.8	0.7	0.8	1.3	1.6	1.4	1.1	0.6	0.6	0.6	0.6	0.7	0.6	0.6	2.3	2.1	2.4	2.1	1.9	2.7	2.3		
FL	0.8	1.1	1.4	1.6	1.6	1.7	1.4	1.0	1.1	1.1	1.2	1.0	1.1	1.0	2.2	2.3	2.4	2.3	2.2	2.2	2.2		
GA	2.1	2.7	2.6	2.3	2.2	3.8	2.9	1.2	0.8	2.6	1.0	1.4	1.5	1.6	3.0	2.9	2.1	3.0	2.2	2.4	3.1		
HI	0.7	0.5	0.8	0.4	0.9	0.8	0.9	0.6	0.2	0.3	0.3	0.3	0.3	0.3	2.5	1.0	2.1	2.0	2.1	2.1	2.1		
IA	1.4	2.6	1.8	3.0	3.7	3.5	3.7	1.9	1.4	1.1	1.0	1.3	1.4	1.3	1.7	2.4	1.9	1.8	2.5	2.0	2.1		
ID	1.4	1.8	1.6	1.9	2.4	1.6	1.2	0.5	3.8	1.2	1.4	1.7	0.9	0.9	1.9	3.7	2.9	3.3	3.1	2.5	2.3		
IL	1.7	2.5	2.2	2.4	2.6	2.5	2.9	1.0	1.1	0.8	1.0	1.0	0.9	1.0	2.8	2.9	2.6	2.7	2.6	2.6	2.7		
IN	1.7	1.4	1.7	1.5	1.7	2.0	2.2	1.4	1.6	1.2	1.2	1.3	1.2	1.2	3.6	2.8	2.7	2.2	2.4	2.3	2.4		
KS	3.3	2.9	2.4	3.2	3.5	3.9	3.9	2.5	2.1	1.6	1.7	1.8	1.4	1.5	3.0	3.5	2.7	3.9	3.1	2.8	2.7		
KY	1.3	1.6	1.8	1.8	2.0	2.0	1.8	2.4	1.6	2.0	1.6	1.5	1.4	1.3	4.0	2.8	2.8	2.5	2.7	2.4	2.5		
LA	1.9	3.2	2.6	2.1	2.3	2.4	2.3	3.3	3.5	2.7	2.2	2.0	2.0	1.9	3.0	3.4	2.8	2.6	2.3	2.4	2.3		
MA	0.8	1.0	2.1	1.1	2.9	2.5	2.0	1.2	1.1	0.7	1.2	1.2	0.9	0.9	2.3	2.1	3.4	2.5	3.1	2.3	2.3		
MD	1.0	0.7	1.2	0.9	0.9	1.0	0.7	0.6	0.5	0.4	0.5	0.7	0.8	0.7	2.4	2.5	2.7	2.5	2.5	2.9	2.5		
ME	0.4	0.6	0.6	0.8	1.0	1.3	0.5	0.6	0.4	0.5	0.5	0.5	0.6	0.4	2.6	2.6	2.7	3.0	2.9	3.4	2.6		
MI	0.3	0.4	0.5	0.7	1.3	1.2	1.0	0.9	1.0	0.9	0.8	0.8	0.9	0.9	2.4	2.7	2.5	2.4	3.1	2.6	2.3		
MN	0.6	1.1	0.8	1.1	1.1	1.1	0.9	0.7	0.7	0.7	1.0	0.9	0.9	0.7	2.3	1.7	1.9	1.9	2.3	2.4	2.4		
MO	2.2	2.7	2.6	2.3	2.6	2.7	2.9	2.3	2.2	2.0	1.7	1.7	1.6	1.8	3.5	3.3	3.0	2.8	2.9	2.7	2.7		
MS	1.7	4.7	4.4	2.8	3.1	4.0	3.6	4.2	6.0	3.7	1.7	1.8	2.2	1.7	3.2	5.2	3.5	2.8	2.6	2.9	2.7		
MT	1.2	1.1	1.5	3.0	3.7	2.0	2.8	1.8	1.4	2.3	1.1	1.4	1.8	1.7	2.6	2.3	3.6	2.5	2.1	2.3	2.5		
NC	1.4	0.8	0.8	1.0	0.9	1.2	1.0	1.4	0.9	0.9	0.9	0.8	1.0	0.9	3.9	2.9	2.8	3.0	2.7	2.4	2.6		
ND	3.8	3.5	4.0	2.3	2.3	3.9	2.8	7.4	3.1	2.5	1.7	1.8	2.7	1.9	3.8	4.4	2.2	2.4	1.9	1.9	2.1		
NE	1.3	1.0	1.4	1.5	2.0	2.0	1.2	1.0	1.0	1.0	0.9	1.1	0.7	0.7	2.2	2.1	1.9	2.3	2.2	2.3	2.2		
NH	1.1	2.5	1.5	1.9	1.8	1.6	1.6	0.6	0.7	0.6	0.5	0.6	0.7	0.9	2.6	2.6	2.5	2.2	2.8	4.0	3.4		
NJ	0.8	1.0	0.7	0.9	1.6	3.2	2.0	0.8	0.6	0.6	0.6	0.6	1.3	0.7	2.1	2.7	2.3	2.5	2.3	3.2	2.4		
NM	0.0	3.8	1.6	1.7	2.1	1.5	0.9	0.0	3.2	1.1	0.3	0.6	0.6	0.6	0.0	3.7	2.2	2.6	2.7	2.7	2.2		
NV	0.5	1.4	0.9	1.2	1.9	1.4	1.1	0.9	1.3	0.9	0.8	1.1	0.6	0.6	2.1	2.3	1.8	2.1	2.1	1.8	2.0		
NY	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	2.8	0.0	0.0	0.0		
OH	2.8	2.6	2.5	2.5	2.8	2.6	3.1	1.5	2.0	1.8	1.3	1.4	1.2	1.4	2.9	2.9	2.7	2.3	2.3	2.1	2.1		
OK	1.6	2.7	2.3	2.0	2.7	2.6	2.3	2.0	2.4	2.7	1.8	2.4	2.2	1.8	2.7	2.5	2.7	2.3	2.4	2.7	2.4		
OR	0.5	0.7	0.7	0.6	1.5	0.9	0.7	0.4	0.3	0.4	0.4	0.6	0.5	0.3	2.6	2.2	2.3	2.5	2.9	2.4	2.4		
PA	1.5	2.8	2.4	2.4	2.6	2.8	2.6	1.1	1.7	1.6	1.1	1.2	1.3	1.2	2.3	3.1	2.4	2.7	2.5	2.4	2.3		
RI	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.3	0.0	0.0	0.0	0.0	0.2	0.0	1.0	0.0	0.0	0.0	0.0	0.9	0.0		
SC	1.0	1.1	1.2	1.7	1.8	1.6	2.4	1.5	1.5	1.6	1.3	1.1	1.0	1.0	3.2	3.2	2.8	2.8	2.8	2.3	2.9		
SD	0.6	0.8	0.8	0.8	1.0	1.0	1.0	0.4	0.3	0.3	0.3	0.2	0.2	0.3	1.9	2.2	2.2	2.2	2.5	2.1	1.8		
TN	0.9	3.6	2.8	2.6	2.3	2.2	2.6	1.9	2.4	2.3	1.9	1.7	1.6	1.7	1.9	2.9	2.8	2.4	2.6	2.2	1.8		
TX	2.2	2.6	2.6	2.5	2.4	2.2	1.9	3.0	2.5	2.0	1.8	1.6	1.6	1.5	3.2	3.2	2.7	2.6	2.6	2.5	2.4		
UT	1.0	1.0	1.0	0.8	1.1	1.2	1.5	0.8	0.6	0.6	0.6	0.6	0.7	0.7	2.6	2.4	2.2	2.1	2.3	2.5	2.4		
VA	0.6	0.9	0.9	1.3	1.1	1.0	1.2	1.1	0.9	0.9	1.0	1.1	1.3	1.2	2.5	2.3	2.2	2.4	2.4	2.3	2.3		
VT	0.0	0.0	0.0	0.0	0.0	0.7	0.6	0.0	0.0	0.0	0.0	0.0	0.7	0.7	0.0	0.0	0.0	0.0	0.0	2.2	2.3		
WA	1.0	1.4	1.7	1.6	2.3	2.6	1.4	0.7	0.6	0.7	0.7	0.8	0.7	0.8	2.6	2.6	2.9	2.7	2.7	3.2	2.5		
WI	0.9	1.5	2.4	2.1	2.5	2.4	0.9	0.5	0.9	1.5	0.6	0.7	0.6	0.5	2.7	2.3	4.2	2.9	2.2	2.1	2.1		
WV	1.3	2.0	3.4	1.9	1.7	3.0	2.5	1.7	2.1	2.9	1.6	1.7	1.2	1.7	2.7	4.1	3.6	2.1	2.5	2.6	2.6		
WY	3.2	3.1	3.1	4.9	4.7	4.4	4.9	2.8	2.8	2.8	2.6	2.7	1.8	1.9	2.0	2.1	2.1	1.2	0.9	1.5	2.5		
US	1.4	1.9	1.9	1.9	2.1	2.2	2.0	1.5	1.6	1.4	1.3	1.3	1.3	1.2	2.7	2.9	2.6	2.5	2.5	2.5	2.4		
Facilities	1,234	1,384	1,470	1,594	1,761	1,757	1,704	1,240	1,406	1,487	1,612	1,772	1,773	1,712	1,230	1,392	1,475	1,609	1,769	1,760	1,706		

Licensed Nursing Hours

Table 28 shows that the average licensed nursing hours (RNs and LPN/LVNs) per resident day was 2.7 in 1993 and 3.2 in 1999. The ratio varied across states.

Total Nursing Hours

Table 28 shows that the total nursing hours (RNs, LPN/LVNs, and NAs) per resident day was 5.2 in 1993 and 5.8 in 1998. The total hours declined by 5 percent to 5.5 in 1999. The total hours varied across states.

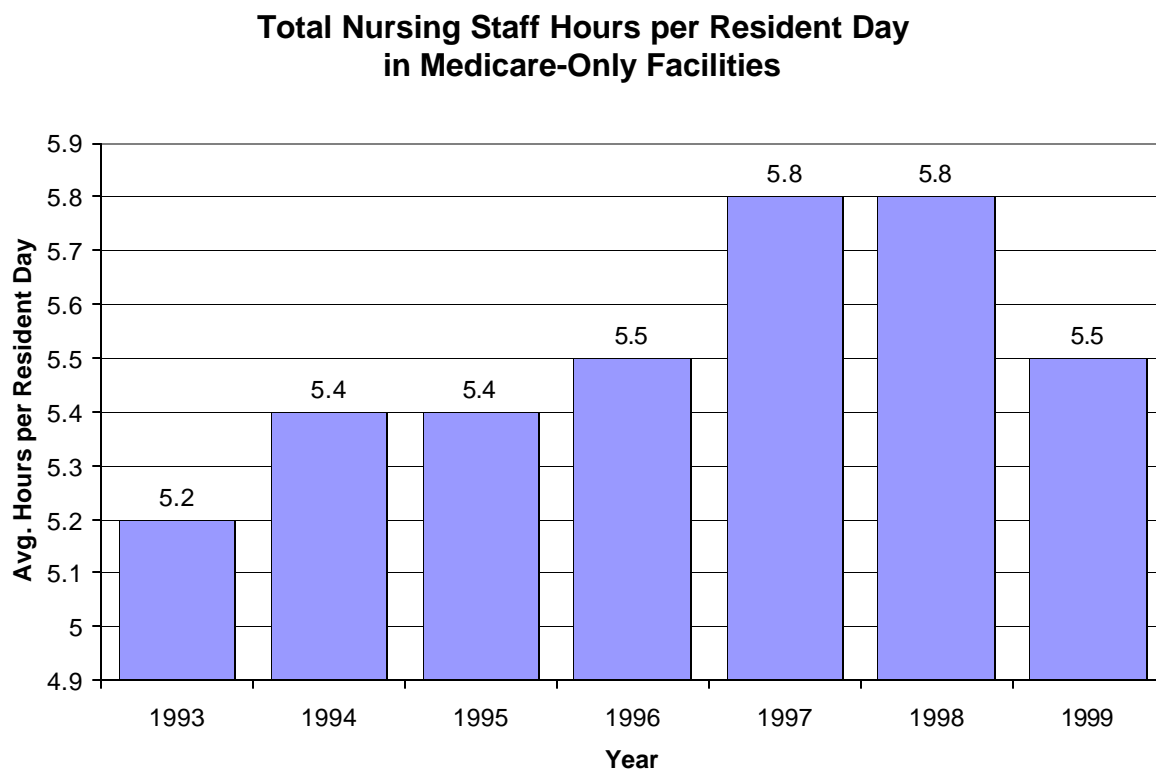


TABLE 28
AVERAGE LICENSED AND COMBINED NURSE HOURS PER RESIDENT DAY
IN FACILITIES WITH MEDICARE ONLY BEDS (TITLE 18)

State	Licensed Nurse Hours							Total Nursing Staff						
	1993	1994	1995	1996	1997	1998	1999	1993	1994	1995	1996	1997	1998	1999
AK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AL	2.2	2.8	3.3	2.5	2.7	3.4	3.7	5.1	4.4	6.3	4.9	5.3	6.5	6.7
AR	3.9	3.6	3.5	3.1	3.6	3.3	4.0	7.1	5.3	5.7	5.1	5.8	5.8	6.1
AZ	1.6	2.0	2.2	3.5	3.8	3.3	4.3	3.8	4.4	4.8	5.5	6.5	6.1	7.3
CA	1.9	2.5	3.1	2.7	3.1	3.1	2.9	4.4	5.2	5.4	5.3	5.7	5.5	5.6
CO	3.9	3.3	3.1	3.0	3.8	3.2	3.2	5.1	5.9	5.3	5.5	5.8	5.4	5.3
CT	1.4	1.6	1.7	2.5	1.4	1.4	1.8	3.8	4.1	4.2	3.5	3.7	4.0	4.6
DC	0.0	1.2	0.0	1.1	1.3	1.4	1.6	0.0	3.9	0.0	3.2	3.5	3.8	4.4
DE	1.4	1.4	1.5	1.9	1.6	2.2	1.7	3.7	3.5	4.2	4.0	3.7	5.3	4.0
FL	1.9	2.0	2.4	2.6	2.5	2.8	2.4	4.1	4.1	4.6	4.9	4.7	5.0	4.5
GA	3.3	4.6	6.0	2.8	3.0	4.1	4.5	6.3	8.5	8.5	4.8	5.2	6.4	7.6
HI	1.3	1.4	1.1	0.8	1.2	1.1	1.2	3.8	3.4	3.2	2.8	3.3	3.1	3.3
IA	3.4	4.4	3.1	4.0	5.0	4.9	5.0	5.1	7.0	5.1	5.9	7.6	6.9	7.0
ID	1.8	3.3	3.2	3.3	4.0	2.7	2.8	3.7	4.6	6.4	6.6	6.4	5.4	5.8
IL	2.7	3.1	3.0	3.5	3.6	3.5	3.5	5.6	5.8	5.4	6.0	6.1	6.1	6.2
IN	2.6	2.2	2.9	2.5	2.7	3.1	3.3	5.7	4.8	4.7	4.7	5.0	5.6	5.6
KS	5.2	5.2	3.9	4.7	4.9	5.3	5.5	7.9	9.0	6.7	7.8	7.8	8.0	8.0
KY	3.7	2.8	3.6	3.4	3.4	3.2	3.1	6.7	5.4	5.7	5.7	6.2	5.6	5.3
LA	5.4	5.4	5.0	4.2	4.5	4.4	4.3	7.6	8.5	7.6	6.5	7.1	6.7	6.6
MA	2.0	2.1	2.9	2.2	4.1	3.5	2.9	4.3	4.3	6.2	4.7	7.2	5.8	5.3
MD	1.6	1.2	1.6	1.4	1.6	1.8	1.4	4.0	3.7	4.3	4.2	4.0	4.6	3.9
ME	1.0	1.0	1.1	1.3	1.6	1.9	1.1	3.7	3.6	3.8	4.3	4.5	5.3	4.2
MI	1.2	1.4	1.4	1.4	2.1	2.2	1.8	3.6	4.1	3.8	3.9	5.1	4.4	4.1
MN	1.3	1.8	1.7	2.3	2.0	2.0	1.6	3.6	3.5	4.2	4.4	4.3	4.3	4.0
MO	3.9	4.4	4.4	4.0	4.3	4.2	4.7	6.8	6.9	6.9	6.7	6.8	6.7	7.3
MS	5.9	5.6	5.5	4.2	4.9	5.8	5.1	9.9	8.2	6.5	7.0	7.8	8.4	7.8
MT	3.0	2.5	3.7	4.1	5.1	3.7	4.6	5.6	4.8	7.3	6.6	6.4	6.1	7.1
NC	2.1	1.7	1.7	1.9	1.7	2.1	1.8	5.6	4.5	4.5	4.4	4.3	4.5	4.4
ND	11.3	6.6	6.5	4.0	4.1	6.6	4.7	15.1	5.3	8.7	6.4	6.0	8.5	6.8
NE	2.2	2.0	2.4	2.3	3.1	2.7	2.0	4.4	4.1	4.3	4.9	5.3	5.0	4.1
NH	1.8	3.3	2.1	2.4	2.4	2.4	2.5	4.4	5.9	4.7	4.6	5.2	6.4	5.8
NJ	1.5	1.6	1.3	1.5	1.5	3.9	2.8	3.6	4.3	3.6	4.0	3.7	6.8	5.0
NM	0.0	2.8	2.7	1.9	2.7	2.1	1.5	0.0	5.3	4.9	4.6	5.4	3.9	3.7
NV	1.1	1.7	1.8	2.1	3.1	2.0	1.7	3.0	3.9	3.7	4.2	4.1	3.8	3.7
NY	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	3.8	0.0	0.0	0.0
OH	3.7	3.8	4.0	3.4	4.1	3.6	4.4	6.7	6.7	6.6	6.0	6.3	5.9	6.7
OK	3.4	3.8	4.4	3.5	4.8	4.6	3.9	5.3	5.9	5.9	5.8	7.2	6.6	6.1
OR	0.9	1.0	1.0	1.0	2.1	1.4	1.1	3.5	3.3	3.4	3.5	5.0	3.8	3.4
PA	2.6	3.2	3.4	3.6	3.8	4.0	3.8	5.0	5.7	5.5	5.7	6.1	6.3	6.1
RI	0.0	0.0	0.0	0.0	0.0	1.0	0.0	1.3	0.0	0.0	0.0	0.0	1.6	0.0
SC	2.5	2.0	2.6	3.0	2.9	2.9	3.4	4.9	4.8	5.4	5.6	5.6	5.5	6.1
SD	1.0	1.1	1.1	1.1	1.2	1.2	1.3	2.8	3.3	3.4	3.3	3.7	3.3	3.0
TN	3.3	4.6	5.3	4.2	3.9	4.0	4.3	5.4	6.0	6.6	6.7	6.5	6.3	6.3
TX	5.0	4.1	4.3	4.2	3.9	3.7	3.3	7.5	7.0	6.6	6.5	6.4	6.1	5.7
UT	1.4	1.6	1.5	1.4	1.8	1.9	2.3	3.9	3.7	3.7	3.4	4.0	4.3	4.6
VA	1.7	1.9	1.9	2.3	2.2	2.3	2.4	4.2	4.2	4.0	4.7	4.6	4.6	4.7
VT	0.0	0.0	0.0	0.0	0.0	1.4	1.3	0.0	0.0	0.0	0.0	0.0	3.6	3.6
WA	1.8	2.0	2.5	2.2	3.1	3.3	2.3	4.3	4.6	5.3	4.9	5.8	6.5	4.7
WI	1.3	2.4	4.3	2.7	3.2	3.5	1.3	4.0	4.7	8.5	5.6	5.6	6.0	3.4
WV	3.0	4.1	6.3	3.5	3.4	4.0	4.1	6.1	7.1	9.8	5.6	5.9	6.7	6.6
WY	6.0	5.9	5.9	8.5	7.4	6.2	5.0	8.0	8.0	8.0	10.9	8.4	7.7	9.3
US	2.7	2.9	3.1	3.1	3.3	3.3	3.2	5.2	5.4	5.4	5.5	5.8	5.8	5.5
Facilities	1,194	1,304	1,427	1,550	1,718	1,714	1,664	1,173	1,301	1,402	1,535	1,700	1,697	1,651

Total Certified Facilities (Title 19, Title 18/19, and Title 18)

Table 29 and 30 shows a combined total of about 14,000 facilities (with Title 19, Title 18/19, and Title 18 only beds) which had useable staffing data for the staffing analysis in 1999.

Registered Nursing Hours

The average RN hours per resident day are shown in Table 29. The average hours were 0.4 in 1993. The ratio of RNs hours increased to 0.7 in 1999. This was 42 minutes per resident day or 14 minutes per 8 hour shift.

LPN/LVN Nursing Hours

The average LPN/LVN hours per resident day are shown in Table 29. There were an average of 0.7 hours per resident day in 1993-1999. This was 42 minutes per resident day or 14 minutes per 8 hour shift.

Nursing Aide/Assistant Hours

The average NA hours per resident day are shown in Table 29. The average was 2.1 hours in 1993-1999. This was 126 minutes per resident day or 42 minutes per 8 hour shift.

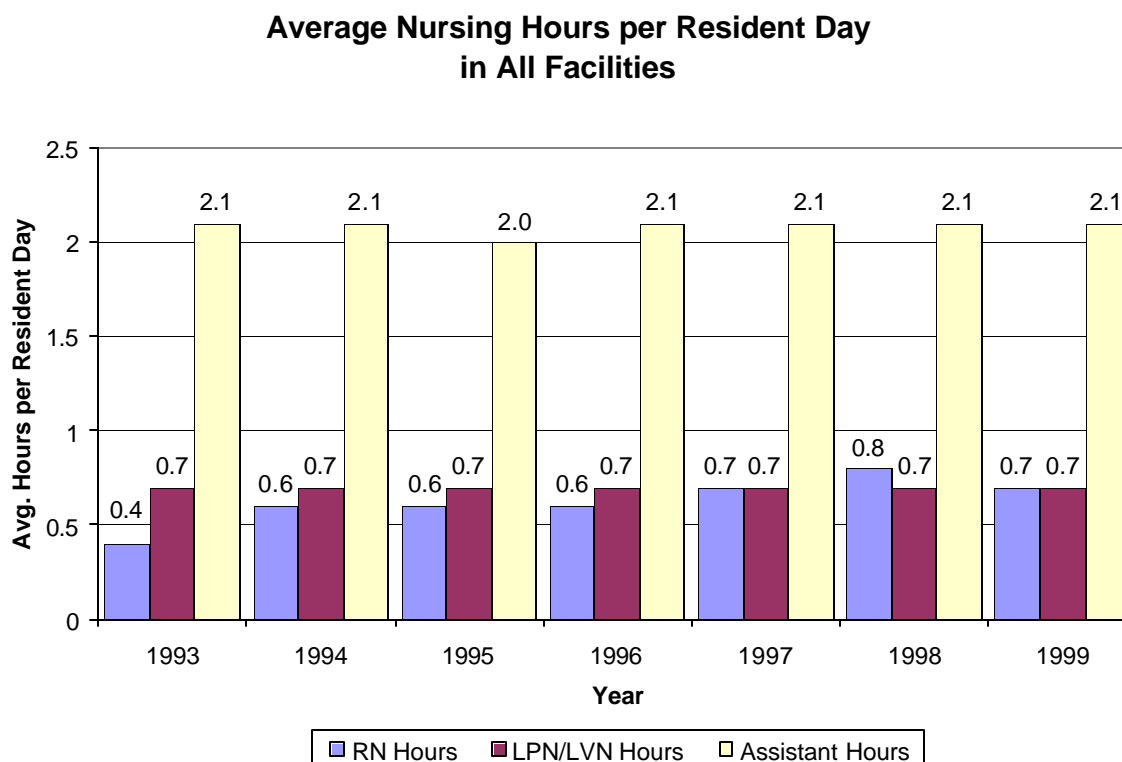


TABLE 29
AVERAGE RN, LPN/LVN, & ASSISTANT HOURS PER RESIDENT DAY
IN ALL CERTIFIED NURSING FACILITIES IN THE U.S.

State	RN Hours							LPN/LVN Hours							Assistant Hours						
	1993	1994	1995	1996	1997	1998	1999	1993	1994	1995	1996	1997	1998	1999	1993	1994	1995	1996	1997	1998	1999
AK	0.7	0.9	0.9	1.1	1.1	1.2	1.3	0.7	0.8	0.7	0.6	0.8	0.6	0.6	2.6	2.9	3.0	3.0	2.9	2.8	2.9
AL	0.2	0.4	0.4	0.4	0.5	0.5	0.5	0.8	0.9	0.9	0.9	0.9	1.0	0.9	2.5	2.5	2.4	2.5	2.4	2.5	2.5
AR	0.3	0.4	0.4	0.4	0.5	0.5	0.5	0.8	0.8	0.8	0.8	0.9	0.8	0.9	1.9	2.0	1.9	1.9	2.0	2.0	2.0
AZ	0.8	0.8	0.6	0.7	0.9	0.9	0.9	0.8	0.9	0.7	0.7	0.7	0.7	0.7	2.3	2.4	2.1	2.0	2.1	2.1	2.1
CA	0.4	0.6	0.6	0.6	0.8	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	2.1	2.2	2.1	2.1	2.2	2.1	2.1
CO	0.6	1.0	0.8	0.8	1.0	1.0	1.0	0.7	0.9	0.7	0.7	0.7	0.7	0.7	2.0	2.2	1.9	1.9	2.0	2.0	2.0
CT	0.6	0.7	0.6	0.7	0.7	0.8	0.8	0.4	0.4	0.4	0.5	0.5	0.5	0.5	1.9	1.9	1.9	2.0	2.0	2.1	2.1
DC	0.5	0.6	0.5	0.8	0.8	0.6	0.7	0.7	0.8	0.7	0.7	0.8	0.9	0.8	2.1	2.4	2.4	2.4	2.4	2.5	2.5
DE	0.6	0.7	0.8	0.9	1.2	1.1	1.0	0.6	0.6	0.6	0.6	0.6	0.5	0.6	2.3	2.1	2.3	2.1	2.0	2.4	2.2
FL	0.4	0.5	0.6	0.8	0.8	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	2.0	2.0	2.1	2.0	2.0	2.0	2.0
GA	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.7	0.7	0.8	0.8	0.8	0.8	0.8	2.0	2.0	2.0	2.0	2.0	2.0	2.0
HI	0.7	0.7	0.7	0.7	0.8	0.9	1.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2.2	2.3	2.4	2.2	2.3	2.2	2.4
IA	0.3	0.5	0.5	0.6	0.6	0.7	0.7	0.4	0.5	0.5	0.5	0.5	0.5	0.5	1.8	1.8	1.8	1.8	1.8	1.8	1.8
ID	0.4	0.7	0.7	0.8	1.1	0.9	0.7	0.7	1.0	0.7	0.8	0.9	0.7	0.6	2.4	2.6	2.5	2.6	2.6	2.4	2.0
IL	0.4	0.6	0.6	0.7	0.8	0.8	0.8	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.8	1.8	1.8	1.7	1.8	1.7	1.8
IN	0.3	0.5	0.5	0.6	0.7	0.7	0.8	0.7	0.8	0.8	0.8	0.9	0.8	0.8	2.0	1.8	1.8	1.8	1.8	1.7	1.8
KS	0.4	0.5	0.5	0.6	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.9	1.9	1.9	2.0	2.0	1.9	1.9
KY	0.4	0.6	0.6	0.7	0.8	0.9	0.8	0.8	0.8	0.9	0.8	0.9	0.9	0.8	2.5	2.3	2.3	2.3	2.4	2.3	2.3
LA	0.3	0.6	0.5	0.5	0.6	0.6	0.6	0.9	1.0	0.9	0.9	0.9	0.9	0.9	2.1	1.7	1.6	2.0	1.9	2.0	1.9
MA	0.4	0.5	0.6	0.7	0.8	0.8	0.8	0.5	0.6	0.6	0.6	0.6	0.6	0.6	2.0	2.1	2.1	2.2	2.2	2.2	2.2
MD	0.3	0.4	0.5	0.6	0.6	0.7	0.7	0.5	0.6	0.5	0.5	0.5	0.6	0.6	2.1	2.1	2.1	2.1	2.1	2.2	2.2
ME	0.4	0.6	0.6	0.8	0.9	1.0	0.8	0.6	0.4	0.5	0.5	0.5	0.5	0.4	2.6	2.6	2.7	2.8	2.8	2.9	2.6
MI	0.3	0.4	0.4	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	2.2	2.2	2.2	2.2	2.3	2.2	2.2
MN	0.3	0.4	0.4	0.5	0.6	0.6	0.5	0.6	0.6	0.6	0.6	0.6	0.7	0.7	1.9	1.9	1.9	1.9	2.0	1.9	2.0
MO	0.5	0.6	0.6	0.6	0.7	0.7	0.7	0.8	0.8	0.8	0.7	0.7	0.8	0.8	2.3	2.2	2.2	2.2	2.2	2.2	2.3
MS	0.2	0.4	0.6	0.7	0.9	1.0	0.8	0.8	0.9	1.0	0.9	0.9	1.0	0.9	1.9	2.1	2.1	2.1	2.2	2.2	2.1
MT	0.5	0.6	0.6	0.8	1.0	0.8	0.9	0.6	0.5	0.6	0.6	0.6	0.6	0.6	2.2	2.2	2.2	2.3	2.2	2.3	2.3
NC	0.4	0.6	0.5	0.6	0.6	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.8	0.7	2.4	2.3	2.3	2.3	2.3	2.2	2.2
ND	0.4	0.5	0.7	0.6	0.7	0.7	0.7	0.5	0.6	0.6	0.6	0.6	0.6	0.6	2.0	2.3	2.2	2.3	2.3	2.3	2.4
NE	0.3	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.9	1.8	1.9	1.9	1.9	1.9	2.0
NH	0.5	0.8	0.7	0.8	0.8	0.9	1.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2.1	2.3	2.3	2.1	2.3	2.2	2.2
NJ	0.5	0.6	0.6	0.6	0.7	0.9	0.9	0.5	0.5	0.5	0.5	0.5	0.6	0.6	2.0	2.1	2.1	2.1	2.1	2.2	2.1
NM	0.3	0.7	0.5	0.6	0.9	0.8	0.7	0.6	0.7	0.6	0.5	0.5	0.5	0.5	2.0	2.1	2.1	2.2	2.1	2.2	2.2
NV	0.6	1.3	0.9	1.2	1.7	1.3	1.0	0.9	1.2	0.9	0.8	1.1	0.6	0.6	2.1	2.3	1.9	2.1	2.2	1.9	2.1
NY	0.4	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	2.0	2.0	2.0	2.0	2.0	2.0	2.1
OH	0.5	0.6	0.6	0.7	0.8	0.8	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8	2.1	2.1	2.1	2.1	2.1	2.1	2.1
OK	0.3	0.4	0.3	0.4	0.5	0.6	0.5	0.7	0.7	0.7	0.6	0.8	0.8	0.7	1.9	1.9	1.9	2.1	2.1	2.0	2.0
OR	0.5	0.7	0.6	0.7	0.8	0.7	0.7	0.4	0.4	0.4	0.4	0.4	0.4	0.4	2.3	2.3	2.2	2.3	2.3	2.3	2.3
PA	0.5	0.8	0.8	0.8	1.0	1.1	1.0	0.7	0.7	0.7	0.7	0.7	0.8	0.7	2.1	2.2	2.1	2.1	2.1	2.1	2.1
RI	0.5	0.5	0.5	0.6	0.7	0.7	0.7	0.4	0.3	0.3	0.3	0.3	0.3	0.3	1.9	2.0	2.0	2.0	2.1	2.0	1.9
SC	0.4	0.5	0.5	0.6	0.7	0.7	0.9	0.8	0.9	0.9	0.9	0.9	0.8	0.8	2.3	2.3	2.2	2.2	2.3	2.1	2.3
SD	0.4	0.6	0.6	0.6	0.7	0.7	0.7	0.3	0.3	0.3	0.3	0.3	0.3	0.3	1.8	1.9	1.9	2.0	2.0	2.0	2.0
TN	0.2	0.5	0.5	0.5	0.6	0.6	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	1.8	1.9	1.9	1.9	2.0	1.9	1.8
TX	0.4	0.6	0.7	0.8	0.8	0.8	0.7	1.0	1.0	0.9	0.9	0.9	0.9	0.9	2.0	2.1	2.0	2.1	2.1	2.1	2.0
UT	0.8	0.9	0.8	0.7	1.0	1.0	1.1	0.8	0.6	0.6	0.6	0.6	0.6	0.6	2.3	2.2	2.1	2.0	2.1	2.3	2.2
VA	0.3	0.4	0.4	0.5	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.8	0.8	0.8	2.0	2.0	2.0	1.9	2.0	1.9	2.0
VT	0.4	0.5	0.4	0.5	0.6	0.6	0.6	0.7	0.8	0.6	0.6	0.6	0.7	0.7	2.1	1.9	1.9	2.1	2.1	2.3	2.3
WA	0.6	0.7	0.7	0.8	0.9	0.9	0.9	0.5	0.5	0.6	0.5	0.6	0.6	0.6	2.3	2.2	2.3	2.3	2.4	2.4	2.3
WI	0.4	0.6	0.6	0.6	0.7	0.7	0.7	0.4	0.4	0.4	0.4	0.4	0.4	0.4	2.1	2.1	2.1	2.1	2.2	2.1	2.1
WV	0.3	0.4	0.6	0.6	0.6	1.0	0.8	0.7	0.8	0.9	0.8	0.9	0.8	0.9	2.0	2.3	2.3	2.1	2.1	2.2	2.2
WY	0.6	0.7	0.7	0.8	1.0	1.0	1.2	0.7	0.6	0.6	0.6	0.6	0.6	0.6	2.1	2.1	2.1	2.1	2.1	2.1	2.2
US	0.4	0.6	0.6	0.6	0.7	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	2.1	2.1	2.0	2.1	2.1	2.1	2.1
Facilities	13366	14108	14093	14446	14462	14202	13902	13345	14136	14118	14487	14507	14237	13921	13313	14100	14087	14462	14477	14208	13901

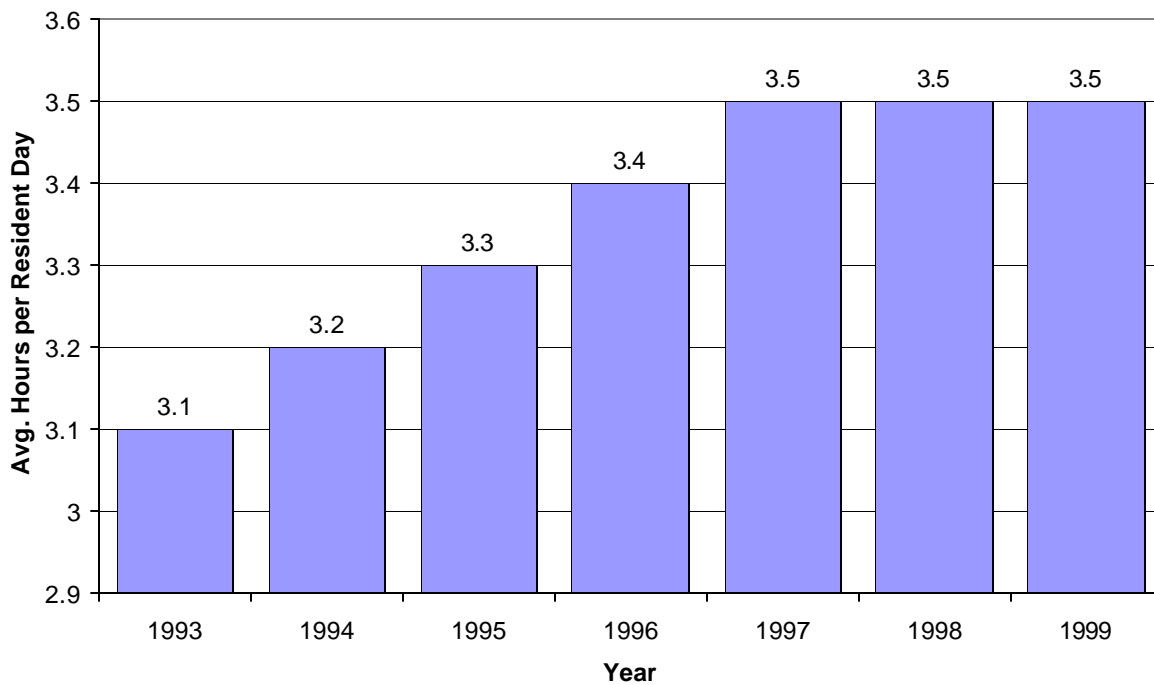
Licensed Nursing Hours

Table 30 shows the average licensed nursing hours (RNs and LPN/LVNs) per resident day was 1.1 in 1993 and 1.4 in 1999.

Total Nursing Hours

Table 30 shows the total nursing hours (RNs, LPN/LVNs, and NAs) per resident day was 3.1 to 3.5 hours per resident day over the 1993-1999 period. In 1999, this was about 210 minutes per resident day or 70 minutes per 8 hour shift.

Total Nursing Staff Hours per Resident Day in All Facilities



**AVERAGE LICENSED AND COMBINED NURSE HOURS PER RESIDENT DAY
IN ALL CERTIFIED NURSING FACILITIES COMBINED**

State	Licensed Nurse Hours							Total Nursing Staff Hours						
	1993	1994	1995	1996	1997	1998	1999	1993	1994	1995	1996	1997	1998	1999
AK	1.6	1.7	1.7	1.8	1.7	1.9	2.0	4.5	4.6	4.7	4.6	4.5	4.6	4.5
AL	1.1	1.3	1.3	1.3	1.4	1.4	1.4	3.6	3.7	3.7	3.8	3.8	4.0	3.9
AR	1.0	1.2	1.1	1.2	1.3	1.4	1.4	3.0	3.0	3.1	3.1	3.3	3.4	3.4
AZ	1.6	1.4	1.4	1.5	1.6	1.6	1.6	3.7	3.6	3.5	3.5	3.7	3.7	3.7
CA	1.1	1.2	1.2	1.2	1.4	1.4	1.3	3.1	3.3	3.3	3.4	3.5	3.5	3.4
CO	1.3	1.4	1.5	1.4	1.7	1.7	1.7	3.1	3.5	3.4	3.4	3.7	3.7	3.7
CT	1.0	1.1	1.1	1.1	1.2	1.2	1.3	2.8	3.0	3.0	3.1	3.3	3.3	3.4
DC	1.2	1.4	1.2	1.5	1.6	1.5	1.5	3.5	3.9	3.5	3.8	3.8	3.8	4.0
DE	1.2	1.3	1.4	1.5	1.6	1.7	1.5	3.4	3.4	3.7	3.6	3.5	4.2	3.8
FL	1.2	1.3	1.4	1.6	1.6	1.7	1.6	3.3	3.3	3.4	3.6	3.6	3.7	3.7
GA	0.9	1.0	1.1	1.1	1.1	1.2	1.2	3.0	3.1	3.1	3.1	3.1	3.2	3.3
HI	1.1	1.2	1.1	1.2	1.3	1.3	1.3	3.4	3.6	3.5	3.5	3.7	3.7	3.9
IA	0.8	0.9	0.9	1.0	1.1	1.2	1.2	2.6	2.7	2.7	2.8	2.9	2.9	3.0
ID	1.1	1.4	1.4	1.5	1.9	1.6	1.6	3.6	3.8	4.0	4.1	4.3	4.2	4.2
IL	0.9	1.2	1.1	1.2	1.3	1.3	1.3	2.8	2.9	2.9	3.0	3.1	3.1	3.0
IN	1.0	1.3	1.3	1.4	1.5	1.5	1.6	3.0	3.0	3.0	3.2	3.3	3.3	3.3
KS	0.9	1.1	1.0	1.1	1.2	1.3	1.3	2.8	3.0	2.9	3.1	3.2	3.2	3.2
KY	1.2	1.3	1.5	1.5	1.6	1.6	1.7	3.6	3.6	3.6	3.8	4.0	3.9	3.9
LA	1.3	1.5	1.4	1.3	1.5	1.6	1.6	3.2	3.4	3.2	3.3	3.5	3.5	3.5
MA	1.0	1.1	1.2	1.3	1.4	1.4	1.4	3.0	3.2	3.3	3.4	3.5	3.6	3.5
MD	0.9	1.0	1.0	1.1	1.1	1.3	1.3	3.0	3.1	3.1	3.3	3.3	3.5	3.4
ME	1.0	1.0	1.1	1.2	1.4	1.5	1.3	3.6	3.6	3.8	4.0	4.1	4.4	4.0
MI	0.9	1.0	1.0	1.1	1.2	1.2	1.2	3.2	3.3	3.3	3.4	3.5	3.4	3.4
MN	0.9	1.1	1.1	1.2	1.2	1.2	1.2	2.9	3.0	3.0	3.1	3.2	3.2	3.2
MO	1.2	1.4	1.3	1.4	1.4	1.5	1.5	3.3	3.4	3.4	3.6	3.6	3.7	3.7
MS	1.0	1.1	1.4	1.5	1.8	1.9	1.7	2.9	3.1	3.2	3.6	4.0	4.0	3.8
MT	1.1	1.1	1.2	1.4	1.6	1.4	1.4	3.2	3.4	3.5	3.6	3.7	3.7	3.7
NC	1.1	1.3	1.3	1.4	1.4	1.5	1.4	3.4	3.6	3.5	3.6	3.6	3.7	3.7
ND	1.0	1.2	1.3	1.2	1.3	1.3	1.3	3.1	3.2	3.6	3.5	3.6	3.7	3.7
NE	0.8	1.0	1.1	1.2	1.2	1.2	1.2	2.7	2.9	2.9	3.0	3.2	3.2	3.2
NH	1.1	1.3	1.2	1.2	1.4	1.3	1.5	3.2	3.5	3.5	3.3	3.6	3.5	3.6
NJ	1.0	1.1	1.1	1.1	1.2	1.4	1.4	3.0	3.2	3.2	3.2	3.3	3.6	3.6
NM	0.8	1.0	1.1	1.1	1.3	1.3	1.2	2.9	3.1	3.1	3.2	3.4	3.3	3.3
NV	1.3	1.7	1.8	2.0	2.8	1.9	1.6	3.2	3.8	3.7	4.1	4.1	3.8	3.7
NY	1.1	1.1	1.1	1.1	1.2	1.2	1.2	3.1	3.1	3.0	3.1	3.2	3.3	3.3
OH	1.2	1.4	1.4	1.5	1.6	1.6	1.7	3.4	3.5	3.5	3.6	3.6	3.6	3.8
OK	0.9	1.0	1.0	1.0	1.3	1.3	1.2	2.7	2.8	2.8	3.1	3.4	3.3	3.2
OR	0.9	1.0	1.0	1.0	1.2	1.1	1.1	3.1	3.3	3.2	3.4	3.5	3.4	3.4
PA	1.2	1.4	1.4	1.5	1.7	1.8	1.7	3.3	3.5	3.5	3.6	3.8	4.0	3.9
RI	0.9	0.9	0.9	1.0	1.0	1.0	1.1	2.9	2.9	2.9	3.0	3.1	3.0	3.0
SC	1.3	1.4	1.4	1.5	1.5	1.6	1.7	3.4	3.5	3.7	3.7	3.8	3.8	4.0
SD	0.8	0.9	0.9	1.0	1.1	1.1	1.1	2.6	2.8	2.8	3.0	3.1	3.1	3.0
TN	0.9	1.2	1.2	1.3	1.4	1.4	1.5	2.8	3.0	3.0	3.2	3.3	3.4	3.4
TX	1.4	1.4	1.6	1.6	1.6	1.7	1.6	3.3	3.4	3.5	3.6	3.7	3.7	3.6
UT	1.3	1.5	1.4	1.3	1.6	1.6	1.8	3.5	3.5	3.5	3.3	3.8	3.9	4.0
VA	1.0	1.2	1.1	1.2	1.3	1.4	1.4	3.0	3.2	3.1	3.2	3.3	3.4	3.4
VT	1.0	1.3	1.1	1.2	1.2	1.4	1.3	3.1	3.4	3.2	3.3	3.4	3.6	3.6
WA	1.1	1.3	1.3	1.3	1.5	1.5	1.5	3.4	3.5	3.6	3.7	3.9	4.0	3.8
WI	0.9	1.0	1.0	1.1	1.2	1.2	1.1	3.0	3.1	3.2	3.2	3.3	3.3	3.3
WV	1.0	1.3	1.4	1.4	1.5	1.7	1.7	3.1	3.5	3.6	3.5	3.7	3.9	3.9
WY	1.3	1.3	1.3	1.3	1.6	1.6	1.6	3.5	3.4	3.4	3.5	3.8	3.7	4.1
US	1.1	1.2	1.2	1.3	1.4	1.4	1.4	3.1	3.2	3.3	3.4	3.5	3.5	3.5
Facilities	13,059	13,768	13,744	14,089	14,121	13,856	13,549	12,913	13,600	13,574	13,930	13,943	13,693	13,386

FACILITY DEFICIENCIES FROM STATE SURVEY EVALUATIONS

Background

Nursing facilities provide care to prevent problems or to address resident problems with cognition, communication/hearing, vision, physical functioning, continence, psychosocial functioning, mood and behavior, oral/ nutritional and dental care, skin condition, and medications (Morris et al., 1990; Gustafson et al., 1990). These care processes can include urinary training programs, assistance with feeding and mobility, and other activities. A number of clinical process measures have been associated with poor patient outcomes. Urethral catheterization may place residents at greater risk for urinary infection and hospitalization or other complications such as bladder and renal stones, abscesses, and renal failure (Ouslander, Kane and Abrass, 1982; Ouslander and Kane, 1984; Ribeiro and Smith, 1985). Restraints have been under criticism because their use may cause decreased muscle tone and increased likelihood of falls, incontinence, pressure ulcers, depression, confusion and mental deterioration (Evans and Strumpf, 1989; Libow and Starer, 1989; Burton et al., 1992; Phillips et al., 1993). Tube feedings also increase the risk of complications including lung infections, aspiration, misplacement of the tube and pain (Libow and Starer, 1989). Another common problem in nursing homes is the improper use of psychotropic drugs identified in a number of studies (Harrington et al., 1992). An outcome is an evaluation of the impact of facility

care on a resident, whereas a process indicator is services or activities which a facility does or does not provide. A number of quality outcomes have been identified, such as: urinary incontinence, falls, weight loss, and infectious disease (Libow and Starer, 1989). Other negative outcomes are behavioral/ emotional problems, cognitive problems, decubitus ulcers, and deterioration in physical functioning (Zimmerman et al., 1995).

State surveyors assess both the process and the outcomes of nursing home care in 15 major areas. Each of these areas has specific regulations which state surveyors review to determine whether or not facilities have met the standards. In July 1995, HCFA consolidated the 325 measures of quality to a total of 185 measures. This report shows data for 1993 through 1999 using the 185 consolidated measures.

Of the total survey requirements, most are considered process indicators and some are outcome measures. The process measures include whether proper procedures are used in providing each of the major nursing home services. The outcome measures include ensuring that negative problems do not occur such as: residents without an indwelling catheter are not catheterized; residents do not experience a reduction in range of motion; residents able to eat alone/with assistance are not fed by naso-gastric

tube; and residents maintain acceptable parameters of nutritional status.

Where a facility fails to meet a standard, a deficiency or citation is given to the facility for that individual standard. Beginning in July 1995, HCFA surveyors also rate each deficiencies based on severity for purposes of enforcement (not shown in this report). The deficiencies are given for problems which can result in a negative impact on the health and safety of residents.

The overall deficiency data on process and outcome measures from OSCAR are limited to whether or not the facility meets each of the minimum standards. Since there are many survey measures (or items), only a selected list of these are presented in the report. The measures with the highest percent of

facilities with deficiencies were examined.

Each table shows an identifying number (F-tag) and a short description of each standard or item. A detailed list of all the F-tags and longer descriptions are shown in the last table. Definitions of deficiencies are given in the State Operations Manual which was published in June 1995 by the Health Care Financing Administration.

There was a decline in the average number of deficiencies issued per facility over the 1993-1997 period (Harrington et al., 1999). By 1999, there was an increase in deficiencies over the previous three years. HCFA has placed a growing emphasis on improving the survey and enforcement process (HCFA, 1998).

FINDINGS

DEFICIENCIES FROM QUALITY OF CARE EVALUATION

Average Number of Deficiencies Per Certified Nursing Facility

Table 31 shows the U.S. average number of deficiencies per facility decreased from 7.9 deficiencies per facility in 1993 to 5.7 per facility in 1999. Although the numbers are small, this represented a 28 percent reduction in the average number of deficiencies given over the period. In 1999, the average number varied substantially across the states from 2.0 percent in New Jersey to 11.3 and 11.4 percent in California and Nevada respectively.

Percent of Facilities with No Deficiencies

The percent of facilities reporting no deficiencies in the U.S. increased from 11.4 percent in 1993 to 17.5 percent in 1999 (See Table 31). This was a 54 percent increase during the period. The percent of facilities with no deficiencies varied by state from 1.5 percent in Washington to 48.5 percent in New Jersey in 1999.

Avg. Number of Deficiencies & Percent Without Deficiencies

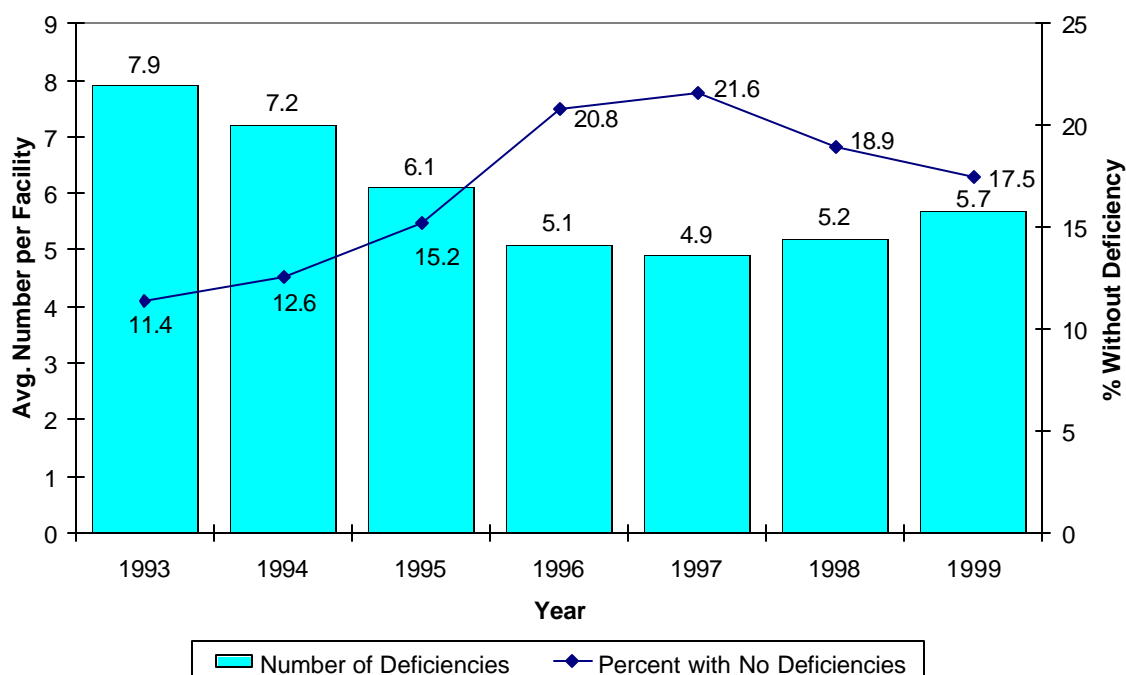


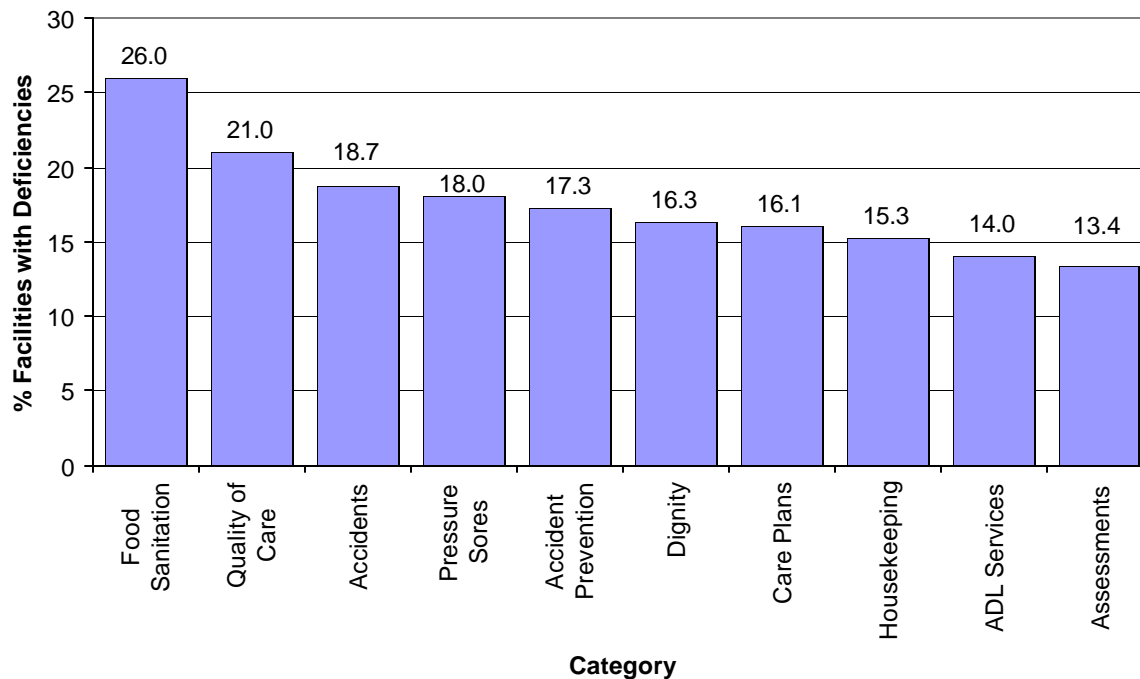
TABLE 31
AVERAGE NUMBER OF DEFICIENCIES PER CERTIFIED NURSING FACILITY
AND PERCENT OF FACILITIES WITH NO DEFICIENCIES

State	Average Number Of Deficiencies Per Facility							Percent of Facilities With No Deficiencies						
	1993	1994	1995	1996	1997	1998	1999	1993	1994	1995	1996	1997	1998	1999
AK	10.8	4.3	3.2	2.2	3.6	3.2	6.1	0.0	21.4	15.4	31.3	21.4	21.4	7.1
AL	5.4	7.4	6.7	6.4	6.1	5.9	7.4	6.7	7.9	7.1	12.0	7.1	7.4	7.1
AR	7.6	7.5	8.1	8.2	7.5	7.3	7.4	4.6	4.1	5.8	6.6	3.9	4.7	6.5
AZ	3.6	7.1	7.1	5.7	5.1	6.0	7.1	23.7	11.9	2.7	4.9	5.9	6.2	9.2
CA	17.8	16.2	11.7	10.7	10.7	10.4	11.3	2.4	1.2	3.3	4.0	3.0	1.8	4.2
CO	6.9	2.5	2.4	2.6	2.3	2.2	2.8	5.0	28.4	31.0	33.7	42.8	34.9	27.9
CT	5.6	3.7	2.3	1.5	2.1	2.7	4.0	13.6	18.0	37.1	46.5	33.6	23.6	12.6
DC	10.8	9.4	6.1	6.1	4.6	4.7	4.3	0.0	5.6	0.0	11.1	9.1	0.0	21.4
DE	6.3	7.2	6.6	9.5	7.3	10.1	7.2	21.6	7.0	12.1	2.7	11.9	7.4	17.7
FL	5.7	6.8	7.0	6.1	6.4	7.2	6.5	16.4	10.9	10.5	15.2	11.0	10.5	10.9
GA	5.7	6.1	5.0	3.3	2.6	3.6	4.4	15.6	14.8	17.3	34.3	32.1	23.4	18.7
HI	18.1	18.4	9.7	4.8	6.6	7.8	6.7	0.0	0.0	4.8	2.5	9.5	2.3	7.7
IA	4.8	4.0	3.8	4.0	4.8	4.6	4.1	17.9	23.9	25.7	24.9	17.9	15.8	20.6
ID	10.9	8.5	6.1	6.3	7.1	7.1	7.3	3.1	7.7	7.5	10.8	7.8	6.3	9.0
IL	8.2	8.5	7.9	6.2	6.0	5.8	6.1	5.1	4.0	5.5	9.0	6.9	7.9	10.5
IN	7.3	7.7	7.4	6.5	6.8	7.8	7.4	11.3	8.2	7.5	11.9	9.5	7.4	10.3
KS	8.9	6.8	6.5	6.2	5.5	5.1	6.1	4.6	8.6	5.4	11.3	11.4	19.5	14.3
KY	4.2	3.1	4.1	2.3	3.2	6.0	7.3	39.0	37.8	44.9	56.4	49.2	13.8	8.9
LA	11.7	7.8	6.3	4.7	4.2	3.7	4.5	8.8	14.1	15.6	20.3	23.2	30.4	27.4
MA	5.7	4.7	4.6	3.2	2.6	2.8	4.1	13.5	16.7	22.9	36.0	47.8	41.3	32.5
MD	2.7	4.0	4.1	2.6	2.2	2.4	2.8	31.8	21.5	30.1	34.8	36.7	37.4	41.8
ME	3.6	4.5	4.0	2.4	2.7	3.3	3.3	35.2	13.0	10.4	32.0	32.8	13.6	24.6
MI	16.1	13.3	13.6	9.8	8.6	9.3	9.9	1.0	0.7	1.4	3.7	2.7	3.1	3.0
MN	7.4	6.8	5.3	2.9	2.7	3.6	3.7	8.4	7.6	9.7	27.4	28.6	25.2	21.6
MO	7.9	4.8	4.1	4.2	3.6	4.1	5.1	14.2	27.4	25.8	28.2	29.6	23.0	20.7
MS	10.6	10.8	8.0	4.8	3.9	4.6	5.6	7.9	11.1	12.6	24.7	27.9	16.0	13.2
MT	10.3	9.6	7.2	5.7	3.5	5.6	5.4	4.2	3.1	0.0	14.0	22.1	10.9	7.2
NC	5.9	5.8	4.8	4.0	3.4	4.6	5.7	9.5	10.6	17.9	22.7	34.8	25.7	18.6
ND	6.5	6.2	4.8	6.6	7.9	7.4	5.0	2.5	3.7	16.9	8.1	4.0	6.8	12.6
NE	6.0	4.7	3.5	3.6	2.6	3.0	3.5	7.3	13.1	24.8	29.7	42.9	34.4	23.9
NH	2.2	2.7	2.0	4.4	3.3	2.7	3.9	36.4	43.3	38.9	22.9	29.3	38.7	33.3
NJ	4.4	3.8	4.0	2.6	2.4	1.9	2.0	19.0	28.9	27.7	36.9	42.5	47.7	48.5
NM	6.2	4.7	3.7	1.7	1.8	4.5	5.1	8.7	15.6	29.9	48.1	57.1	22.7	20.8
NV	19.2	17.2	15.0	12.7	14.3	14.2	11.4	0.0	7.5	0.0	0.0	0.0	7.3	7.5
NY	2.4	2.5	3.1	2.7	2.2	2.0	3.4	31.9	31.5	27.6	31.4	35.3	39.6	24.9
OH	7.4	7.3	6.6	4.8	4.0	4.6	5.3	8.4	7.1	10.6	17.2	22.2	22.9	20.3
OK	4.9	4.6	4.7	4.0	4.2	3.7	4.2	15.1	19.1	20.4	24.8	25.3	28.3	31.3
OR	7.6	5.9	5.6	5.2	4.7	4.6	6.8	8.3	15.3	16.0	24.0	26.3	21.9	19.0
PA	6.1	5.4	3.8	3.1	3.2	3.8	4.1	12.9	11.6	21.4	27.8	25.0	19.5	18.8
RI	5.5	4.4	3.6	2.9	3.4	3.6	3.1	15.6	15.2	19.5	26.7	22.8	21.4	28.3
SC	9.5	6.4	5.2	7.3	7.9	7.9	8.3	2.2	6.0	7.1	6.7	6.3	4.9	4.8
SD	5.4	4.4	4.5	4.3	3.3	3.7	4.7	8.3	8.5	19.8	19.0	21.8	11.6	10.6
TN	8.6	7.6	7.2	5.9	2.6	3.7	4.6	4.2	8.1	7.3	9.9	29.9	21.8	14.7
TX	8.6	7.9	5.9	4.1	4.2	4.2	4.5	4.9	9.5	14.2	23.2	23.2	20.1	22.4
UT	8.9	5.2	5.0	4.4	3.2	4.0	3.5	4.6	6.7	9.2	13.9	24.2	23.6	23.0
VA	4.2	3.6	3.4	3.8	3.1	3.5	3.6	21.7	24.7	27.3	35.7	36.3	32.0	30.8
VT	7.9	7.1	7.2	2.1	1.8	2.0	2.1	2.4	5.6	5.0	21.6	37.8	32.4	45.2
WA	9.5	8.1	7.3	7.5	8.4	8.6	9.7	6.8	7.4	8.9	9.4	4.7	4.4	1.5
WI	4.5	3.6	3.4	3.0	3.5	3.9	3.4	19.8	18.6	22.0	27.5	20.8	20.5	26.5
WV	15.4	8.3	6.5	4.6	5.7	5.7	5.5	0.0	3.1	9.0	14.6	10.3	7.3	10.5
WY	15.6	14.4	7.2	3.1	6.3	4.6	4.7	3.6	0.0	5.3	29.7	2.8	12.5	11.1
US	7.9	7.2	6.1	5.1	4.9	5.2	5.7	11.4	12.6	15.2	20.8	21.6	18.9	17.5

Top Ten Deficiencies For Certified Facilities in 1999

The top ten most frequently cited deficiencies in the U.S. are shown by state in 1999 on Table 32. The five largest number of deficiencies were given for failure to ensure sanitary food (26.0 percent); to ensure quality of care (21.0 percent); to remove accident hazards in the environment (18.7 percent); to prevent pressure sores (18.0 percent); and to prevent accidents (17.3 percent).

Top 10 Deficiencies in 1999



Top Ten States Citing the Top Deficiencies in 1999

Table 32 also shows the top ten states in terms of the number of deficiencies which were issued to nursing facilities for each of the top 10 deficiencies (See states with asterisks). In 1999, Michigan had the most deficiencies (with 8) while California and Washington had 7 deficiencies each within the top 10 deficiency categories.

TABLE 32
TOP TEN U.S. DEFICIENCIES BY STATE FOR FACILITIES CERTIFIED
CALENDAR YEAR 1999

Percent of Facilities with Deficiencies

	Food Sanitation (F371)	Quality of Care (F309)	Accidents (F323)	Pressure Sores (F314)	Accident Prevention (F324)
US	26.0	21.0	18.7	18.0	17.3
AK	35.7	21.4	0.0	14.3	28.6 *
AL	45.5 *	5.1	22.2	24.2	27.8 *
AR	49.3 *	13.8	24.4	22.6	9.2
AZ	39.1	5.7	25.3 *	19.5	17.2
CA	39.1	36.0 *	33.0 *	26.9 *	27.9 *
CO	21.9	8.7	16.0	10.0	6.8
CT	8.8	50.0 *	3.8	18.5	35.7 *
DC	64.3 *	21.4	21.4	7.1	14.3
DE	32.4	41.2 *	14.7	17.6	44.1 *
FL	32.9	14.0	10.2	13.2	8.8
GA	37.1	32.9	19.6	13.4	11.9
HI	33.3	17.9	7.7	17.9	7.7
IA	20.8	20.8	21.1	13.2	19.4
ID	42.3 *	24.4	14.1	24.4 *	42.3 *
IL	35.9	12.9	34.8 *	27.8 *	20.7
IN	31.4	20.3	34.4 *	17.3	20.1
KS	24.9	40.2 *	30.3 *	26.4 *	30.6 *
KY	38.3	26.6	21.6	18.4	7.8
LA	22.2	10.5	6.8	10.8	4.3
MA	9.3	8.9	3.9	9.8	19.1
MD	6.0	32.8	6.0	15.7	9.7
ME	14.9	16.7	21.1	7.0	2.6
MI	46.0 *	42.8 *	40.3 *	31.6 *	34.1 *
MN	13.0	20.6	6.6	14.0	11.7
MO	24.6	10.0	8.7	20.9	15.2
MS	28.6	15.4	46.2 *	18.7	5.5
MT	20.6	19.6	4.1	35.1 *	16.5
NC	27.2	34.2 *	12.9	15.1	19.9
ND	27.6	31.0	2.3	26.4 *	25.3
NE	15.2	20.4	9.6	13.5	13.0
NH	18.2	18.2	4.5	22.7	21.2
NJ	7.3	6.8	1.0	6.8	6.8
NM	20.8	1.3	22.1	3.9	5.2
NV	62.5 *	32.5	25.0	25.0 *	32.5 *
NY	8.3	20.3	11.8	20.1	13.5
OH	26.2	11.4	22.3	22.2	26.0
OK	17.9	1.7	10.7	10.7	2.1
OR	11.3	50.0 *	7.7	32.4 *	43.0 *
PA	16.0	20.0	14.0	16.0	22.4
RI	17.4	17.4	8.7	10.9	9.8
SC	46.3 *	40.1 *	23.8	21.1	12.9
SD	42.4 *	3.5	30.6 *	14.1	10.6
TN	40.1 *	16.4	21.9	13.5	8.1
TX	21.8	14.7	13.5	11.0	8.4
UT	29.7	9.5	13.5	12.2	1.4
VA	6.2	22.7	4.6	14.2	11.5
VT	9.5	7.1	9.5	9.5	7.1
WA	43.0 *	44.5 *	30.9 *	29.1 *	24.9
WI	6.0	20.9	13.9	11.8	17.1
WV	24.6	33.6 *	6.7	7.5	11.9
WY	30.6	5.6	36.1 *	5.6	2.8

* The ten states in which the highest percentage of facilities had deficiencies.

TABLE 32 (Continued)
TOP TEN U.S. DEFICIENCIES BY STATE FOR FACILITIES CERTIFIED
CALENDAR YEAR 1999
Percent of Facilities with Deficiencies

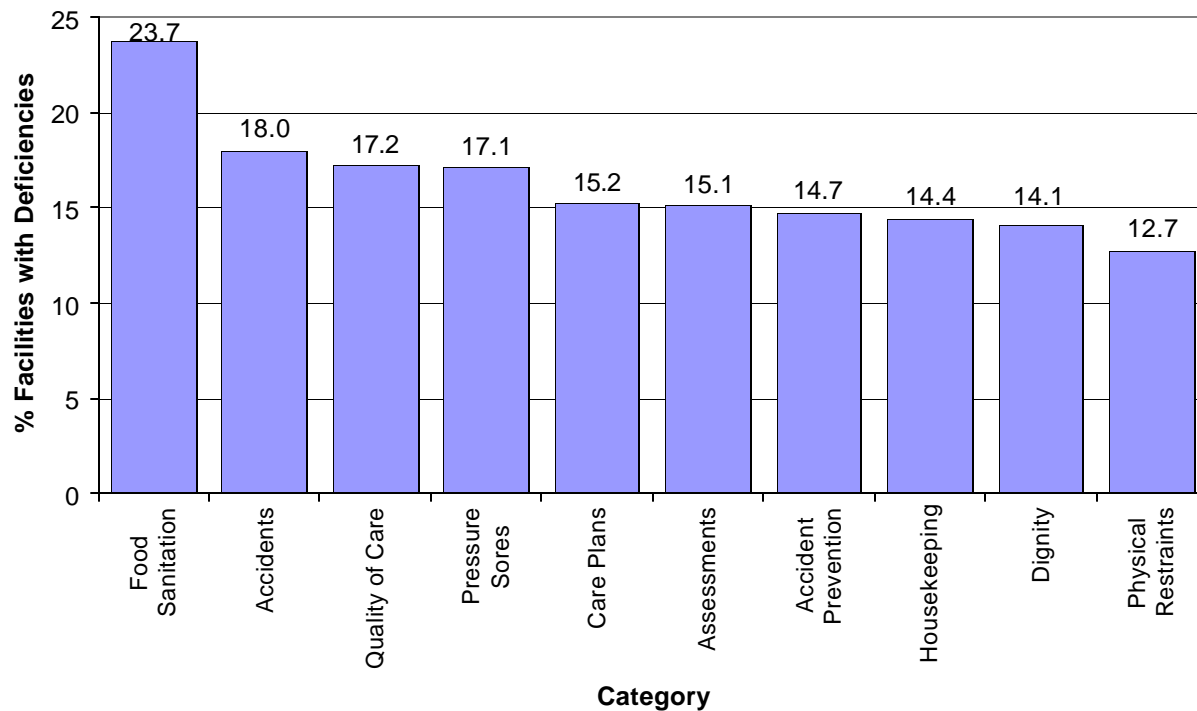
	Dignity (F241)	Comprehensive Care Plans (F279)	Housekeeping (F253)	ADL Services (F312)	Comprehensive Assessments (F272)
US	16.3	16.1	15.3	14.0	13.4
AK	21.4	21.4	7.1	21.4 *	42.9 *
AL	18.2	32.3 *	6.1	32.8 *	28.8 *
AR	11.1	26.7 *	45.6 *	18.9	22.6
AZ	27.6 *	18.4	10.3	10.3	18.4
CA	40.1 *	22.4	31.3 *	22.0 *	15.6
CO	7.3	12.8	25.1 *	10.5	2.3
CT	13.4	25.2	4.2	8.0	13.0
DC	0.0	7.1	35.7 *	0.0	14.3
DE	8.8	41.2 *	11.8	5.9	5.9
FL	24.0 *	26.3 *	9.1	6.2	17.8
GA	9.8	5.0	25.8 *	21.1	9.2
HI	41.0 *	46.2 *	5.1	0.0	48.7 *
IA	4.2	13.9	7.2	16.1	9.7
ID	19.2	19.2	34.6 *	15.4	19.2
IL	21.1	10.1	24.1	17.9	13.1
IN	17.9	8.8	3.6	17.1	25.4 *
KS	8.5	17.9	16.1	26.4 *	8.5
KY	19.9	39.7 *	27.0 *	11.0	28.4 *
LA	13.1	13.4	5.1	8.3	6.0
MA	5.6	6.7	4.6	3.5	16.7
MD	5.2	8.2	3.7	2.2	2.2
ME	14.9	24.6	8.8	1.8	18.4
MI	25.9 *	8.7	34.6 *	23.9 *	5.0
MN	13.7	8.7	1.3	11.7	10.7
MO	10.8	19.1	3.7	23.2 *	12.4
MS	18.1	12.6	47.8 *	1.6	15.9
MT	5.2	15.5	3.1	34.0 *	25.8 *
NC	35.6 *	8.6	14.6	25.1 *	7.3
ND	18.4	0.0	2.3	18.4	8.0
NE	6.1	12.6	4.8	19.6	3.0
NH	7.6	27.3 *	7.6	3.0	21.2
NJ	8.7	6.8	1.9	3.4	8.3
NM	20.8	18.2	6.5	7.8	2.6
NV	32.5 *	47.5 *	7.5	15.0	40.0 *
NY	14.8	7.0	10.3	9.4	2.6
OH	14.7	16.4	12.4	13.7	20.6
OK	12.0	21.3	19.2	19.9	15.1
OR	24.6 *	16.2	2.1	10.6	31.7 *
PA	8.4	22.5	6.4	5.3	7.2
RI	5.4	2.2	16.3	7.6	17.4
SC	34.7 *	38.8 *	22.4	3.4	10.9
SD	3.5	10.6	24.7	4.7	10.6
TN	9.8	22.8	19.3	7.8	16.4
TX	8.2	11.2	21.0	11.5	2.8
UT	18.9	10.8	5.4	8.1	2.7
VA	5.0	29.2 *	1.2	6.5	19.6
VT	4.8	4.8	4.8	4.8	11.9
WA	34.7 *	14.0	40.8 *	27.5 *	10.9
WI	6.5	8.1	7.1	8.3	29.2 *
WV	14.2	11.2	2.2	12.7	14.2
WY	16.7	22.2	2.8	27.8 *	33.3 *

* The ten states in which the highest percentage of facilities had deficiencies.

Top Ten Deficiencies For Certified Facilities in 1998

The top ten most frequently cited deficiencies in the U.S. are shown by state in 1998 on Table 33. The five largest number of deficiencies was given for failure to ensure sanitary food (23.7 percent); to remove accident hazards in the environment (18.0 percent); to ensure quality of care (17.2 percent); to prevent pressure sores (17.1 percent); to prepare comprehensive resident care plans (15.2 percent).

Top 10 Deficiencies in 1998



Top Ten States Citing the Top Deficiencies in 1998

Table 33 also shows the top ten states in terms of the number of deficiencies which were issued to nursing facilities for each of the top 10 deficiencies (See states with asterisks). In 1998, California, Michigan, Nevada and Washington had the most deficiencies (with 7 deficiencies each) of the top 10 deficiency categories.

TABLE 33
TOP TEN U.S. DEFICIENCIES BY STATE FOR FACILITIES CERTIFIED
CALENDAR YEAR 1998

Percent of Facilities with Deficiencies					
	Food Sanitation (F371)	Accidents (F323)	Quality of Care (F309)	Pressure Sores (F314)	Comprehensive Care Plans (F279)
US	23.7	18.0	17.2	17.1	15.2
AK	21.4	7.1	0.0	0.0	7.1
AL	32.9	11.6	9.7	23.1 *	38.0 *
AR	41.1 *	23.3	25.8	22.0	25.0 *
AZ	38.0 *	36.4 *	5.4	13.2	9.3
CA	39.9 *	31.7 *	28.8	24.4 *	20.9
CO	11.3	17.0	6.1	10.4	4.2
CT	3.6	4.4	36.4 *	23.1 *	16.0
DC	78.6 *	14.3	21.4	7.1	14.3
DE	22.2	22.2	40.7 *	18.5	33.3 *
FL	30.5	10.8	20.3	20.5	24.8 *
GA	30.3	17.4	20.9	9.7	1.1
HI	18.2	9.1	11.4	25.0 *	54.5 *
IA	17.7	20.8	18.6	13.6	22.0
ID	48.1 *	24.1	31.6 *	25.3 *	10.1
IL	33.9	30.2 *	12.7	25.1 *	14.3
IN	34.1	35.6 *	20.4	18.7	15.6
KS	23.3	24.3	31.5 *	28.8 *	17.8
KY	28.3	16.4	12.2	13.8	33.6 *
LA	22.4	6.5	3.5	10.9	13.6
MA	5.2	2.3	2.7	10.3	2.9
MD	5.8	8.8	25.7	9.9	5.8
ME	9.3	15.3	18.6	4.2	44.9 *
MI	46.7 *	35.8 *	29.4 *	30.7 *	6.6
MN	6.7	12.7	15.7	14.2	1.2
MO	28.2	8.4	6.4	15.0	17.2
MS	18.5	32.5 *	11.0	16.5	14.0
MT	8.7	8.7	19.6	16.3	12.0
NC	23.4	9.9	23.9	12.7	6.0
ND	22.7	6.8	13.6	21.6	4.5
NE	13.5	10.4	16.1	17.8	12.2
NH	8.0	5.3	13.3	16.0	28.0 *
NJ	7.2	4.2	7.2	5.9	8.2
NM	21.2	13.6	12.1	10.6	21.2
NV	65.9 *	22.0	34.1 *	26.8 *	24.4
NY	8.1	5.9	10.2	12.2	2.0
OH	19.0	21.5	6.5	20.9	14.8
OK	15.2	6.4	2.4	10.8	11.4
OR	7.1	8.4	40.0 *	15.5	12.3
PA	13.5	14.4	14.9	16.1	22.9
RI	29.2	15.7	9.0	12.4	1.1
SC	38.0 *	23.9	31.3 *	29.4 *	46.0 *
SD	34.9 *	34.9 *	2.3	16.3	10.5
TN	31.8	17.5	9.5	11.5	13.5
TX	24.2	14.0	16.4	12.0	9.8
UT	25.8	28.1 *	10.1	12.4	9.0
VA	6.5	2.2	26.0	14.7	40.3 *
VT	5.9	2.9	2.9	11.8	5.9
WA	40.2 *	33.6 *	46.1 *	30.3 *	8.5
WI	12.1	21.5	19.2	8.5	15.9
WV	21.7	2.9	37.7 *	2.9	4.3
WY	30.0	37.5 *	0.0	7.5	10.0

* The ten states in which the highest percentage of facilities had deficiencies.

TABLE 33 (Continued)
TOP TEN U.S. DEFICIENCIES BY STATE FOR FACILITIES CERTIFIED
CALENDAR YEAR 1998
Percent of Facilities with Deficiencies

	Comprehensive Assessments (F272)	Accident Prevention (F324)	Housekeeping (F253)	Dignity (F241)	Physical Restraints (F221)
US	15.1	14.7	14.4	14.1	12.7
AK	7.1	7.1	7.1	7.1	42.9 *
AL	29.6 *	19.9	3.7	9.7	11.6
AR	18.2	6.4	36.4 *	12.7	16.9
AZ	24.0	6.2	27.9 *	13.2	15.5
CA	20.8	24.3 *	28.8 *	36.7 *	21.4 *
CO	9.0	3.3	16.5	6.1	7.5
CT	9.3	32.9 *	4.0	4.0	3.1
DC	7.1	7.1	64.3 *	0.0	7.1
DE	7.4	44.4 *	0.0	25.9 *	29.6 *
FL	17.7	10.0	13.3	24.7 *	15.5
GA	5.1	11.1	24.3 *	6.9	3.1
HI	63.6 *	2.3	9.1	43.2 *	13.6
IA	19.3	16.7	8.1	4.3	7.9
ID	20.3	30.4 *	30.4 *	19.0	13.9
IL	18.6	15.0	23.7	21.0	12.7
IN	25.7	17.0	5.6	18.3	26.5 *
KS	6.8	25.3 *	13.5	9.0	14.3
KY	28.0 *	9.9	25.7 *	14.1	16.4
LA	6.2	2.1	7.4	9.1	3.2
MA	15.3	19.3	0.2	4.0	12.6
MD	2.3	11.1	3.5	7.0	1.2
ME	22.9	1.7	7.6	12.7	15.3
MI	5.6	32.5 *	33.5 *	20.8	25.6 *
MN	23.2	13.0	4.7	14.5	17.0
MO	12.2	13.4	5.4	10.6	5.8
MS	28.0 *	7.5	29.0 *	6.0	5.0
MT	29.3 *	17.4	4.3	5.4	22.8 *
NC	9.1	13.8	9.9	29.9 *	10.9
ND	12.5	25.0 *	14.8	22.7	15.9
NE	6.5	7.0	3.0	5.2	6.5
NH	13.3	6.7	6.7	1.3	2.7
NJ	9.8	4.9	2.9	6.9	4.6
NM	6.1	4.5	10.6	24.2 *	7.6
NV	41.5 *	31.7 *	19.5	26.8 *	24.4 *
NY	1.3	6.3	5.9	7.0	8.0
OH	17.8	23.0	10.2	10.8	11.1
OK	13.8	2.4	10.4	7.4	21.2 *
OR	29.0 *	32.9 *	3.2	14.8	14.8
PA	4.3	20.3	7.1	7.2	11.6
RI	20.2	4.5	21.3	4.5	10.1
SC	25.8 *	8.6	17.2	23.3	9.8
SD	25.6	10.5	15.1	7.0	23.3 *
TN	14.3	3.7	20.1	8.3	4.0
TX	3.9	7.0	22.4	7.5	8.3
UT	2.2	1.1	2.2	29.2 *	3.4
VA	17.3	11.3	0.9	5.6	12.6
VT	8.8	11.8	2.9	11.8	11.8
WA	17.7	28.8 *	33.2 *	26.2 *	19.6
WI	35.9 *	12.6	6.2	6.4	13.1
WV	17.4	8.7	2.9	11.6	14.5
WY	27.5 *	5.0	5.0	32.5 *	22.5 *

* The ten states in which the highest percentage of facilities had deficiencies.

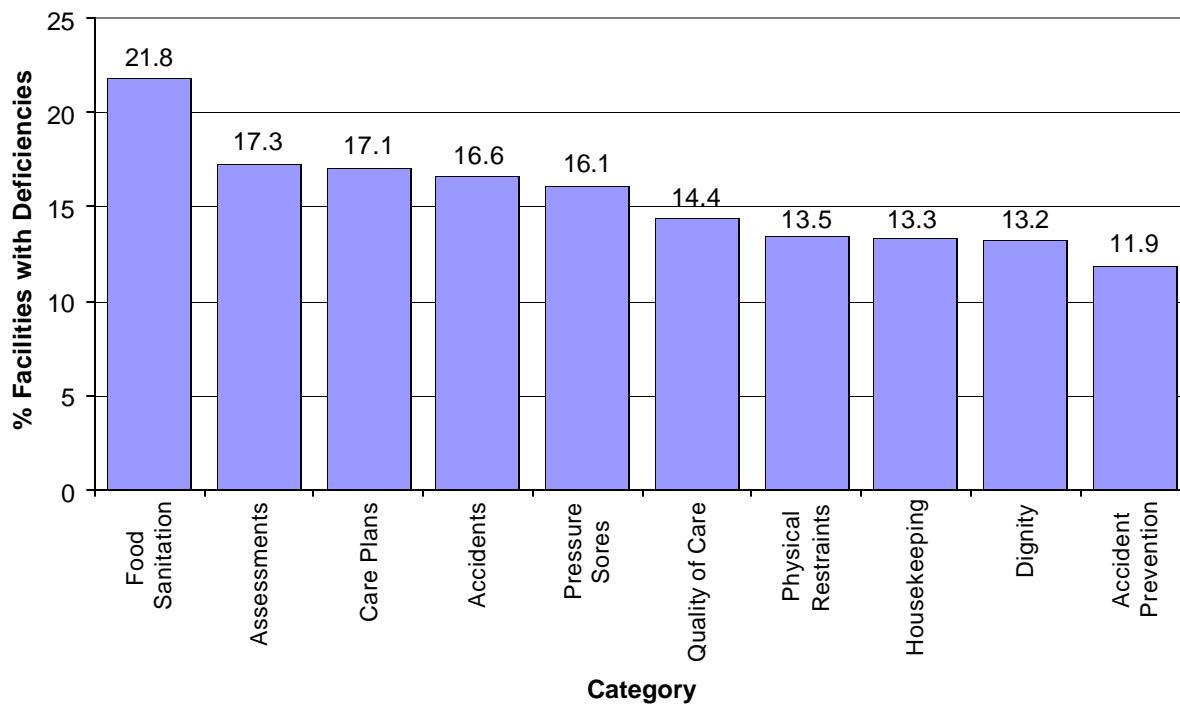
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Top Ten Deficiencies For Certified Facilities in 1997

The top ten most frequently cited deficiencies in the U.S. are shown by state in 1997 on Table 34. The five largest number of deficiencies were given for failure to ensure sanitary food (21.8 percent); to conduct comprehensive resident assessments (17.3 percent); to prepare comprehensive resident care plans (17.1 percent); to remove accident hazards in the environment (16.6 percent); to prevent pressure sores (16.1 percent).

Top 10 Deficiencies in 1997



Top Ten States Citing the Top Deficiencies in 1997

Table 34 also shows the top ten states in terms of the number of deficiencies which were issued to nursing facilities for each of the top 10 deficiencies (See states with asterisks). In 1997, California and Nevada had the most deficiencies (with 8 and 9 deficiencies respectively) of the top 10 deficiency categories.

TABLE 34
TOP TEN U.S. DEFICIENCIES BY STATE FOR FACILITIES CERTIFIED
CALENDAR YEAR 1997

Percent of Facilities with Deficiencies					
	Food Sanitation (F371)	Comprehensive Assessments (F272)	Comprehensive Care Plans (F279)	Accidents (F323)	Pressure Sores (F314)
US	21.8	17.3	17.1	16.6	16.1
AK	14.3	28.6 *	28.6	14.3	0.0
AL	31.6	21.4	39.8 *	13.8	52.0 *
AR	46.3 *	18.0	29.8 *	24.7 *	28.6 *
AZ	53.4 *	10.2	12.7	43.2 *	3.4
CA	41.1 *	27.7	41.1 *	28.8 *	22.6 *
CO	15.4	13.0	5.8	18.8	11.1
CT	2.4	11.5	19.0	1.2	19.4
DC	54.5 *	13.6	9.1	4.5	13.6
DE	21.4	4.8	33.3 *	31.0 *	45.2 *
FL	28.5	20.0	24.7	9.5	15.6
GA	21.7	5.7	1.0	10.4	8.7
HI	23.8	59.5 *	57.1 *	7.1	16.7
IA	18.7	22.4	16.5	17.4	17.0
ID	36.4 *	32.5 *	27.3	16.9	19.5
IL	32.0	31.9 *	24.4	33.9 *	21.5
IN	30.7	25.0	18.8	37.6 *	12.8
KS	25.3	19.0	27.2	23.9	23.4 *
KY	10.4	23.5	22.3	7.7	7.7
LA	21.7	8.0	18.4	5.9	8.9
MA	3.4	20.0	6.6	2.5	7.6
MD	13.0	1.4	5.6	5.1	10.7
ME	18.4	28.0	28.8 *	17.6	5.6
MI	40.9 *	4.2	4.2	33.7 *	35.5 *
MN	3.1	29.1 *	0.8	3.9	7.2
MO	16.1	14.8	15.0	7.3	12.8
MS	17.4	28.4 *	14.4	24.4	18.9
MT	6.3	13.7	2.1	5.3	18.9
NC	17.4	11.3	4.2	8.7	5.8
ND	26.7	14.7	17.3	2.7	30.7 *
NE	8.6	3.4	7.3	8.2	11.2
NH	8.0	32.0 *	45.3 *	2.7	17.3
NJ	5.5	14.0	9.9	2.1	5.1
NM	4.8	6.3	9.5	1.6	4.8
NV	55.3 *	60.5 *	55.3 *	7.9	23.7 *
NY	6.8	2.4	5.6	6.6	12.6
OH	16.4	21.6	13.2	22.7	22.2
OK	20.4	18.3	15.7	6.5	12.0
OR	11.8	30.3 *	11.2	14.5	19.1
PA	11.2	2.3	18.3	12.3	10.7
RI	16.3	20.7	3.3	12.0	9.8
SC	44.6 *	20.0	36.6 *	23.4	23.4 *
SD	24.8	18.8	8.9	30.7 *	6.9
TN	20.2	13.2	11.7	11.1	14.4
TX	23.9	4.6	9.4	13.3	12.9
UT	26.4	1.1	1.1	30.8 *	6.6
VA	9.3	0.8	18.6	8.0	15.6
VT	5.4	5.4	2.7	2.7	13.5
WA	38.4 *	21.7	12.7	27.9 *	31.9 *
WI	7.5	42.1 *	13.0	16.3	8.8
WV	28.2	16.7	14.1	9.0	7.7
WY	47.2 *	19.4	33.3 *	22.2	13.9

* The ten states in which the highest percentage of facilities had deficiencies.

TABLE 34 (Continued)
TOP TEN U.S. DEFICIENCIES BY STATE FOR FACILITIES CERTIFIED
CALENDAR YEAR 1997
Percent of Facilities with Deficiencies

	Quality of Care (F309)	Physical Restraints (F221)	Housekeeping (F253)	Dignity (F241)	Accident Prevention (F324)
US	14.4	13.5	13.3	13.2	11.9
AK	28.6 *	21.4 *	7.1	7.1	21.4 *
AL	7.1	16.3	0.5	12.8	11.7
AR	23.5	14.1	40.0 *	12.9	5.1
AZ	5.9	19.5 *	34.7 *	16.1	1.7
CA	24.3	25.3 *	25.1 *	38.9 *	19.3 *
CO	9.6	10.6	15.4	6.3	2.9
CT	22.5	4.3	2.4	4.0	25.7 *
DC	22.7	4.5	50.0 *	9.1	4.5
DE	21.4	11.9	0.0	14.3	26.2 *
FL	11.6	12.7	13.9	22.7 *	10.3
GA	16.7	2.7	16.1	7.7	7.0
HI	7.1	11.9	2.4	26.2 *	0.0
IA	19.2	9.1	9.8	6.4	18.7 *
ID	31.2 *	27.3 *	23.4 *	11.7	23.4 *
IL	12.2	16.5	25.7 *	16.0	13.7
IN	11.1	25.2 *	10.6	16.4	12.2
KS	33.2 *	15.5	16.8	9.2	18.2
KY	4.6	11.9	6.9	6.2	6.5
LA	4.7	3.0	7.4	9.2	3.0
MA	1.1	13.2	1.7	2.6	14.4
MD	26.5	2.3	6.0	4.2	6.5
ME	16.0	7.2	9.6	4.8	4.0
MI	26.4 *	19.0	30.3 *	18.5 *	22.4 *
MN	10.1	24.5 *	2.6	9.5	2.8
MO	7.1 *	7.5	10.4	8.8	7.8
MS	7.0	5.0	13.9	5.5	4.0
MT	17.9	6.3	3.2	7.4	9.5
NC	17.4	6.9	10.8	24.5 *	14.2
ND	12.0	16.0	16.0	26.7 *	12.0
NE	11.6	6.4	1.3	4.3	5.6
NH	12.0	4.0	5.3	5.3	13.3
NJ	6.5	7.5	3.8	8.6	7.2
NM	0.0	14.3	3.2	9.5	3.2
NV	28.9 *	50.0 *	31.6 *	34.2 *	28.9 *
NY	7.7	9.4	8.1	10.0	9.0
OH	7.3	12.5	6.2	9.3	15.8
OK	0.8	20.4 *	11.0	4.7	0.3
OR	38.2 *	12.5	8.6	16.4	23.0 *
PA	13.2	14.5	4.3	7.0	17.3
RI	5.4	15.2	12.0	2.2	12.0
SC	28.0 *	17.7	11.4	32.0 *	9.1
SD	5.0	20.8 *	5.9	3.0	7.9
TN	7.3	5.0	12.6	5.3	1.8
TX	14.7	8.4	22.8 *	6.8	8.8
UT	17.6	1.1	7.7	14.3	0.0
VA	24.1	5.5	2.1	6.8	11.8
VT	8.1	18.9	0.0	5.4	8.1
WA	37.0 *	14.1	25.7 *	29.0 *	23.2 *
WI	13.8	16.5	7.5	6.5	13.5
WV	25.6 *	20.5 *	2.6	11.5	5.1
WY	8.3	16.7	8.3	41.7 *	2.8

* The ten states in which the highest percentage of facilities had deficiencies.

Nursing Facilities, Staffing, Residents and Facility Deficiencies, 1993-1999

Department of Social & Behavioral Sciences

University of California San Francisco

Selected Deficiencies By State

The following is a presentation of selected deficiencies by state by year. These are presented in the order of the deficiency groups on the survey forms and not based on the number of deficiencies cited. These data show trends over time by state.

Physical Restraints (F221)

Residents have the right to be free of physical restraints imposed for purposes of discipline or convenience and not required to treat the resident's medical symptoms. Restraints are defined as mechanical devices, materials, or equipment that restricts freedom of movement or normal access to one's body. In 1993, 17.8 percent of facilities received deficiencies for this category. In 1999 the number of deficient facilities declined to 11.2 percent (See Table 35).

**Resident Behavior & Facility Practices =
Improper Physical Restraints**

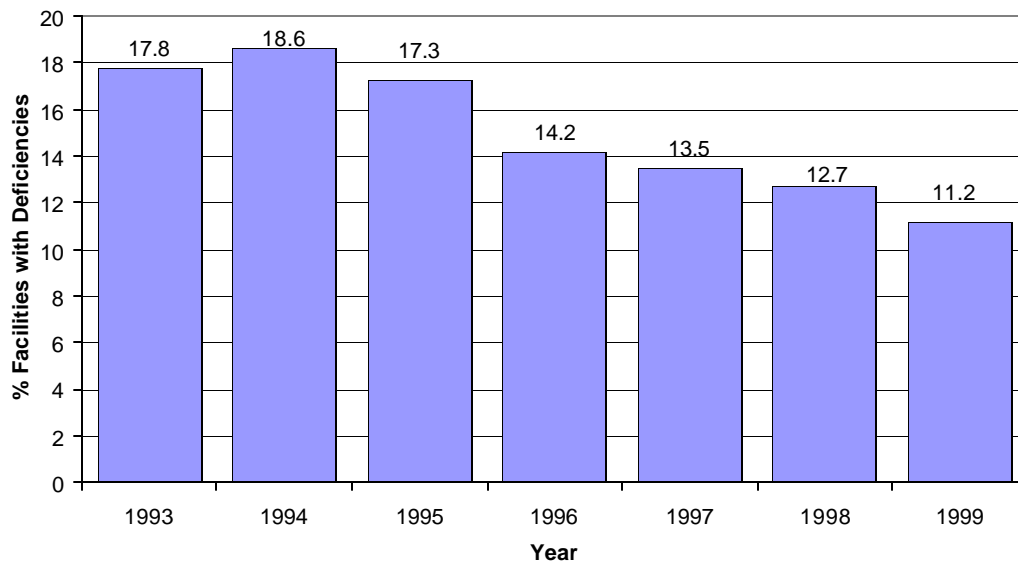


TABLE 35
DEFICIENCY GROUP=RESIDENT BEHAVIOR & FACILITY PRACTICES
PHYSICAL RESTRAINTS (F221)

Percent of Facilities with Deficiencies							
State	1993	1994	1995	1996	1997	1998	1999
AK	0.0	7.1	7.7	0.0	21.4	42.9	50.0
AL	13.9	41.9	32.8	22.1	16.3	11.6	10.6
AR	8.4	14.0	19.6	11.7	14.1	16.9	24.9
AZ	9.3	20.7	20.5	16.9	19.5	15.5	21.8
CA	30.1	33.3	24.8	25.9	25.3	21.4	21.3
CO	10.5	3.0	3.0	6.8	10.6	7.5	8.2
CT	26.7	10.2	6.0	1.8	4.3	3.1	7.6
DC	0.0	11.1	0.0	0.0	4.5	7.1	0.0
DE	2.7	39.5	24.2	21.6	11.9	29.6	20.6
FL	11.2	16.2	21.3	17.1	12.7	15.5	9.8
GA	9.1	20.7	8.8	2.5	2.7	3.1	6.8
HI	48.0	46.2	38.1	10.0	11.9	13.6	25.6
IA	9.6	16.9	12.4	8.6	9.1	7.9	1.2
ID	18.5	19.2	18.8	14.9	27.3	13.9	12.8
IL	14.1	17.1	17.2	15.3	16.5	12.7	12.2
IN	13.3	23.8	14.1	11.7	25.2	26.5	14.8
KS	17.0	29.1	23.6	14.1	15.5	14.3	15.8
KY	4.2	12.0	12.8	10.0	11.9	16.4	13.5
LA	18.6	19.7	13.1	4.8	3.0	3.2	2.6
MA	21.0	19.6	17.1	22.6	13.2	12.6	11.7
MD	1.1	5.0	9.7	6.3	2.3	1.2	7.5
ME	9.6	10.7	9.6	9.6	7.2	15.3	3.5
MI	13.7	17.5	27.3	23.8	19.0	25.6	18.4
MN	22.0	22.6	17.9	13.7	24.5	17.0	2.3
MO	31.5	26.8	13.1	10.7	7.5	5.8	5.5
MS	31.1	21.6	13.6	10.0	5.0	5.0	9.9
MT	26.3	25.0	25.0	19.4	6.3	22.8	21.6
NC	12.1	14.9	17.1	9.6	6.9	10.9	8.1
ND	21.3	7.4	10.8	23.0	16.0	15.9	3.4
NE	18.3	14.0	16.8	9.6	6.4	6.5	7.0
NH	3.0	4.5	8.3	4.3	4.0	2.7	4.5
NJ	9.1	7.8	8.6	5.6	7.5	4.6	2.9
NM	17.4	10.4	19.5	8.9	14.3	7.6	13.0
NV	45.2	57.5	72.2	59.0	50.0	24.4	20.0
NY	12.6	14.0	17.0	9.7	9.4	8.0	10.0
OH	15.8	13.6	21.8	16.1	12.5	11.1	9.1
OK	21.5	24.3	23.0	17.9	20.4	21.2	22.0
OR	26.3	7.3	12.0	13.0	12.5	14.8	14.8
PA	18.5	19.4	19.7	18.6	14.5	11.6	10.3
RI	27.3	15.2	13.4	8.1	15.2	10.1	15.2
SC	31.1	39.6	35.1	25.5	17.7	9.8	15.0
SD	13.9	11.3	24.3	22.0	20.8	23.3	24.7
TN	31.8	29.2	22.7	16.4	5.0	4.0	3.2
TX	9.3	9.7	10.2	6.9	8.4	8.3	7.8
UT	37.5	12.2	23.7	7.6	1.1	3.4	2.7
VA	29.1	19.0	20.6	16.7	5.5	12.6	12.3
VT	26.8	38.9	17.5	18.9	18.9	11.8	7.1
WA	25.1	10.4	11.9	19.1	14.1	19.6	18.1
WI	17.0	7.2	8.8	13.4	16.5	13.1	11.1
WV	18.8	17.2	13.4	10.9	20.5	14.5	14.9
WY	46.4	35.3	5.3	0.0	16.7	22.5	22.2
US	17.8	18.6	17.3	14.2	13.5	12.7	11.2

Dignity (F241)

Facilities must promote care for residents in a manner and in an environment that maintains or enhances dignity and respect in full recognition of his or her individuality. This involves assisting residents to be well groomed, dress appropriately, promote independence in dining, allowing private space and property, speaking and listening respectfully, and focusing on the individual's communication. In 1993, 19.1 percent of facilities received deficiencies for this but deficiencies declined to 16.3 percent in 1999 (See Table 36).

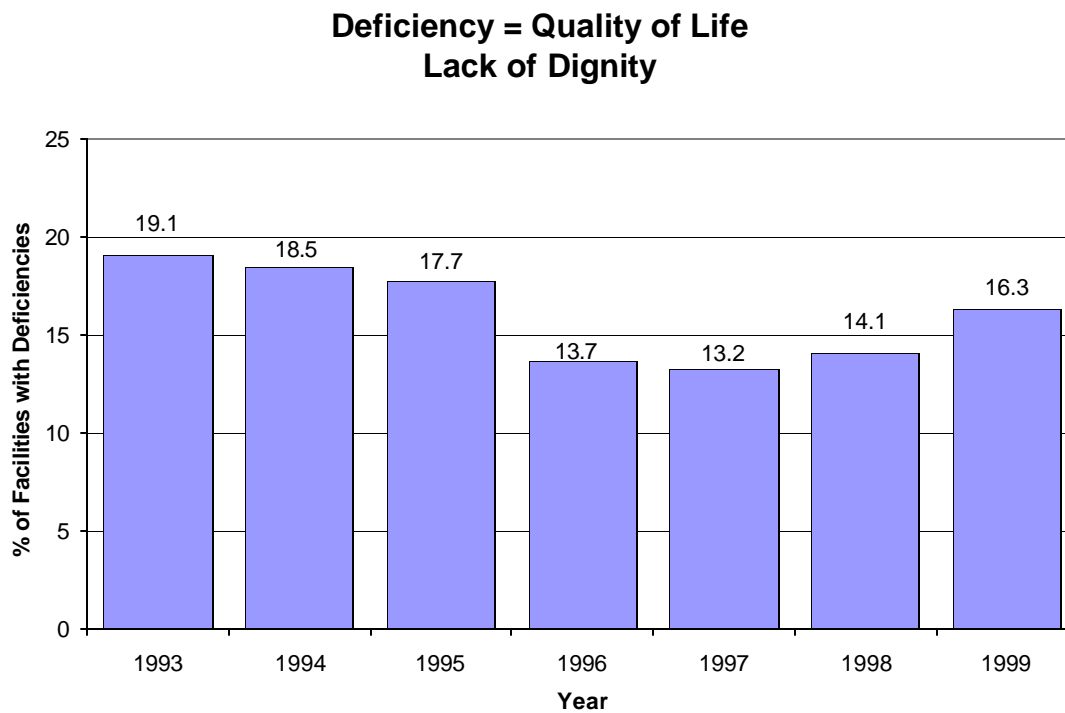


TABLE 36
DEFICIENCY GROUP=QUALITY OF LIFE
DIGNITY (F241)

Percent of Facilities with Deficiencies							
State	1993	1994	1995	1996	1997	1998	1999
AK	8.3	14.3	7.7	0.0	7.1	7.1	21.4
AL	18.0	21.2	14.1	13.9	12.8	9.7	18.2
AR	6.3	11.2	12.7	9.4	12.9	12.7	11.1
AZ	19.5	29.6	26.8	19.7	16.1	13.2	27.6
CA	52.5	52.1	44.1	40.9	38.9	36.7	40.1
CO	17.0	5.1	4.9	7.4	6.3	6.1	7.3
CT	17.7	4.7	4.0	6.1	4.0	4.0	13.4
DC	66.7	33.3	46.2	16.7	9.1	0.0	0.0
DE	2.7	20.9	9.1	24.3	14.3	25.9	8.8
FL	13.6	23.5	19.7	19.8	22.7	24.7	24.0
GA	15.0	16.6	18.4	9.3	7.7	6.9	9.8
HI	32.0	34.6	40.5	25.0	26.2	43.2	41.0
IA	7.8	6.3	4.9	7.0	6.4	4.3	4.2
ID	27.7	12.8	18.8	9.5	11.7	19.0	19.2
IL	25.4	23.4	23.8	18.6	16.0	21.0	21.1
IN	20.7	21.8	18.0	13.0	16.4	18.3	17.9
KS	20.9	19.1	16.4	9.9	9.2	9.0	8.5
KY	8.5	10.8	9.4	5.0	6.2	14.1	19.9
LA	9.8	9.2	14.1	9.7	9.2	9.1	13.1
MA	10.6	5.7	8.7	4.6	2.6	4.0	5.6
MD	6.3	7.0	16.1	7.2	4.2	7.0	5.2
ME	8.8	17.6	14.8	7.2	4.8	12.7	14.9
MI	23.9	18.2	24.3	14.4	18.5	20.8	25.9
MN	19.2	15.0	16.6	14.2	9.5	14.5	13.7
MO	27.0	13.4	13.1	13.2	8.8	10.6	10.8
MS	39.0	27.2	20.6	8.9	5.5	6.0	18.1
MT	14.7	13.5	11.0	6.5	7.4	5.4	5.2
NC	11.8	14.1	15.3	20.8	24.5	29.9	35.6
ND	7.5	18.5	14.5	24.1	26.7	22.7	18.4
NE	13.7	10.9	8.0	8.7	4.3	5.2	6.1
NH	3.0	6.0	0.0	1.4	5.3	1.3	7.6
NJ	9.9	12.2	20.8	12.0	8.6	6.9	8.7
NM	13.0	15.6	10.4	8.9	9.5	24.2	20.8
NV	38.7	65.0	41.7	38.5	34.2	26.8	32.5
NY	9.2	9.4	15.9	12.2	10.0	7.0	14.8
OH	23.0	21.7	19.9	12.1	9.3	10.8	14.7
OK	1.2	5.9	6.0	6.3	4.7	7.4	12.0
OR	8.3	8.7	15.3	14.9	16.4	14.8	24.6
PA	22.8	19.9	13.4	7.5	7.0	7.2	8.4
RI	15.6	9.8	4.9	1.2	2.2	4.5	5.4
SC	8.1	12.7	18.2	24.8	32.0	23.3	34.7
SD	12.0	12.3	11.7	7.0	3.0	7.0	3.5
TN	20.4	20.5	23.3	14.8	5.3	8.3	9.8
TX	12.1	14.8	11.4	4.1	6.8	7.5	8.2
UT	17.0	12.2	27.6	17.7	14.3	29.2	18.9
VA	10.7	12.5	12.6	10.3	6.8	5.6	5.0
VT	7.3	5.6	27.5	5.4	5.4	11.8	4.8
WA	23.6	19.3	24.5	19.5	29.0	26.2	34.7
WI	14.7	7.5	6.3	5.1	6.5	6.4	6.5
WV	21.3	21.9	16.4	9.1	11.5	11.6	14.2
WY	39.3	29.4	42.1	8.1	41.7	32.5	16.7
US	19.1	18.5	17.7	13.7	13.2	14.1	16.3

Activities Program (F248)

Facilities must provide residents with ongoing activities that meet the interests and the physical, mental, and psychosocial well-being needs of each resident. In 1993, 12.0 percent of facilities in the U.S. were given deficiencies in this category while 8.6 percent received deficiencies in 1999 (See Table 37).

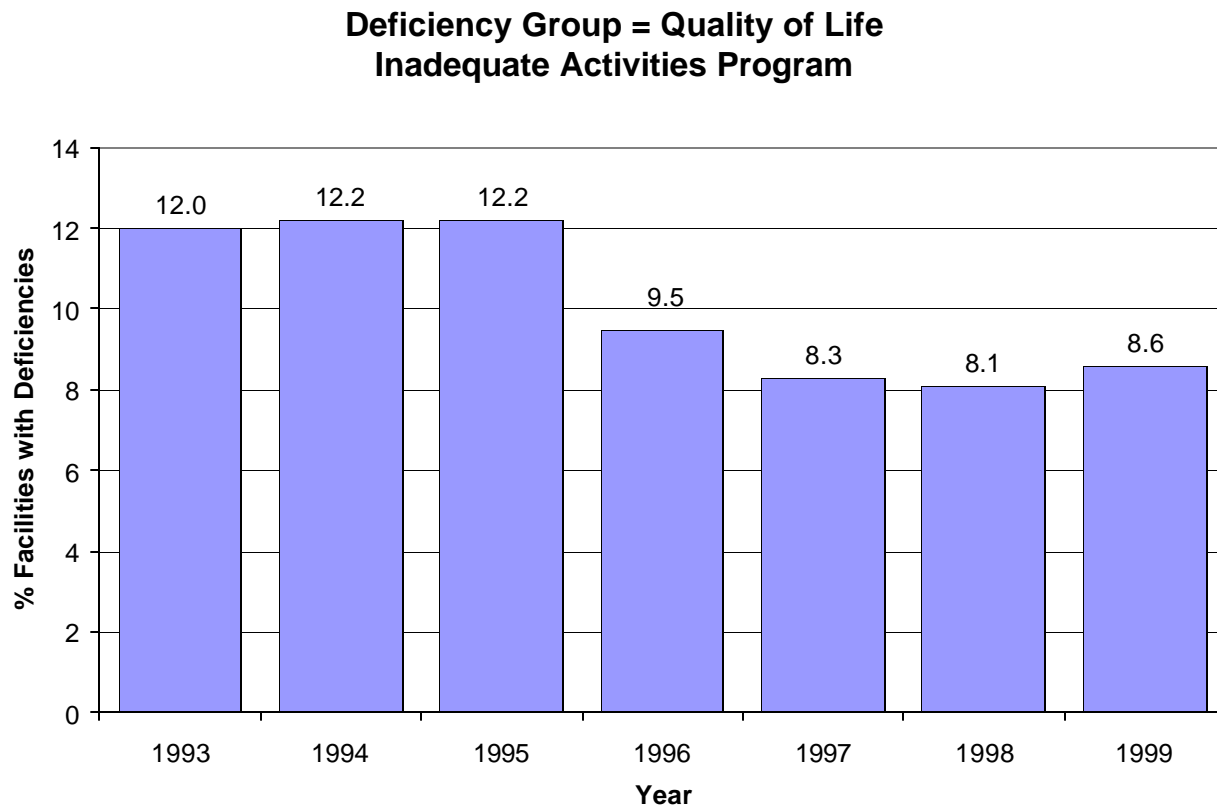


TABLE 37
DEFICIENCY GROUP=QUALITY OF LIFE
ACTIVITIES PROGRAM (F248)

Percent of Facilities with Deficiencies							
State	1993	1994	1995	1996	1997	1998	1999
AK	8.3	0.0	0.0	6.3	14.3	7.1	0.0
AL	8.2	16.3	9.6	6.7	7.1	13.9	12.1
AR	6.7	12.8	14.2	18.8	12.5	10.2	6.0
AZ	9.3	22.2	10.7	4.9	5.9	4.7	8.0
CA	28.1	27.6	20.0	20.7	18.8	17.8	19.2
CO	17.0	7.6	3.4	6.8	3.4	3.8	5.9
CT	6.2	3.9	10.4	1.8	1.2	0.4	2.1
DC	6.7	5.6	7.7	0.0	0.0	0.0	0.0
DE	2.7	16.3	9.1	18.9	9.5	14.8	5.9
FL	9.1	10.2	14.1	12.3	12.7	13.6	11.8
GA	3.5	7.1	7.4	4.5	1.0	1.1	3.0
HI	60.0	50.0	33.3	17.5	16.7	31.8	17.9
IA	10.3	5.6	3.9	2.1	5.4	2.6	5.0
ID	20.0	30.8	15.0	14.9	20.8	13.9	7.7
IL	11.6	13.0	13.5	11.1	10.3	11.8	11.8
IN	16.9	16.6	19.7	11.7	13.5	13.1	17.7
KS	16.3	13.3	15.6	16.1	9.2	7.0	9.1
KY	3.9	5.4	10.7	2.9	4.2	7.6	14.2
LA	12.2	6.2	12.2	9.1	5.9	5.6	6.0
MA	9.6	8.1	7.9	4.6	2.6	2.9	3.3
MD	2.1	4.5	4.8	2.4	1.9	1.8	1.5
ME	8.0	6.9	10.4	4.0	3.2	2.5	0.9
MI	28.2	24.3	24.6	19.5	14.8	12.2	13.4
MN	8.7	9.9	8.4	3.9	3.6	8.7	6.4
MO	17.8	13.4	11.9	11.0	5.5	8.6	6.5
MS	6.7	9.9	9.0	4.2	3.0	2.0	6.6
MT	21.1	17.7	12.0	12.9	9.5	14.1	12.4
NC	3.2	6.2	8.8	4.6	2.1	4.4	2.4
ND	5.0	11.1	13.3	8.0	13.3	10.2	6.9
NE	10.5	8.1	8.4	9.6	9.4	3.0	5.7
NH	3.0	4.5	5.6	1.4	1.3	4.0	4.5
NJ	12.2	15.0	23.1	5.6	5.5	6.2	10.2
NM	5.8	13.0	9.1	8.9	6.3	13.6	9.1
NV	6.5	17.5	30.6	17.9	28.9	7.3	15.0
NY	4.6	7.6	8.4	6.8	4.7	3.1	3.7
OH	10.0	9.0	11.8	8.1	6.3	8.2	9.7
OK	7.3	5.0	9.1	11.3	7.0	5.4	6.2
OR	16.7	18.0	21.3	15.6	14.5	5.8	17.6
PA	9.6	10.3	10.2	7.9	5.5	7.1	6.7
RI	5.2	5.4	2.4	2.3	4.3	3.4	4.3
SC	8.1	10.4	9.7	11.5	12.0	4.9	3.4
SD	13.0	8.5	11.7	16.0	6.9	5.8	9.4
TN	8.0	13.1	10.0	6.5	1.5	2.3	2.6
TX	9.4	10.5	8.4	4.9	6.1	4.1	5.9
UT	12.5	5.6	13.2	6.3	5.5	5.6	5.4
VA	4.5	3.4	2.1	6.7	3.0	0.9	1.9
VT	7.3	11.1	12.5	5.4	5.4	0.0	0.0
WA	24.0	21.2	19.7	16.9	20.3	19.2	15.1
WI	9.9	6.7	11.3	9.0	11.8	10.5	6.5
WV	6.3	8.6	6.0	10.9	10.3	14.5	10.4
WY	39.3	38.2	31.6	13.5	30.6	12.5	0.0
US	12.0	12.2	12.2	9.5	8.3	8.1	8.6

Housekeeping (F253)

Housekeeping and maintenance services must be provided to maintain a sanitary, orderly, and comfortable environment. In 1993, 19.5 percent of facilities received deficiencies for failing to meet this requirement compared to 15.3 percent in 1999 (See Table 38).

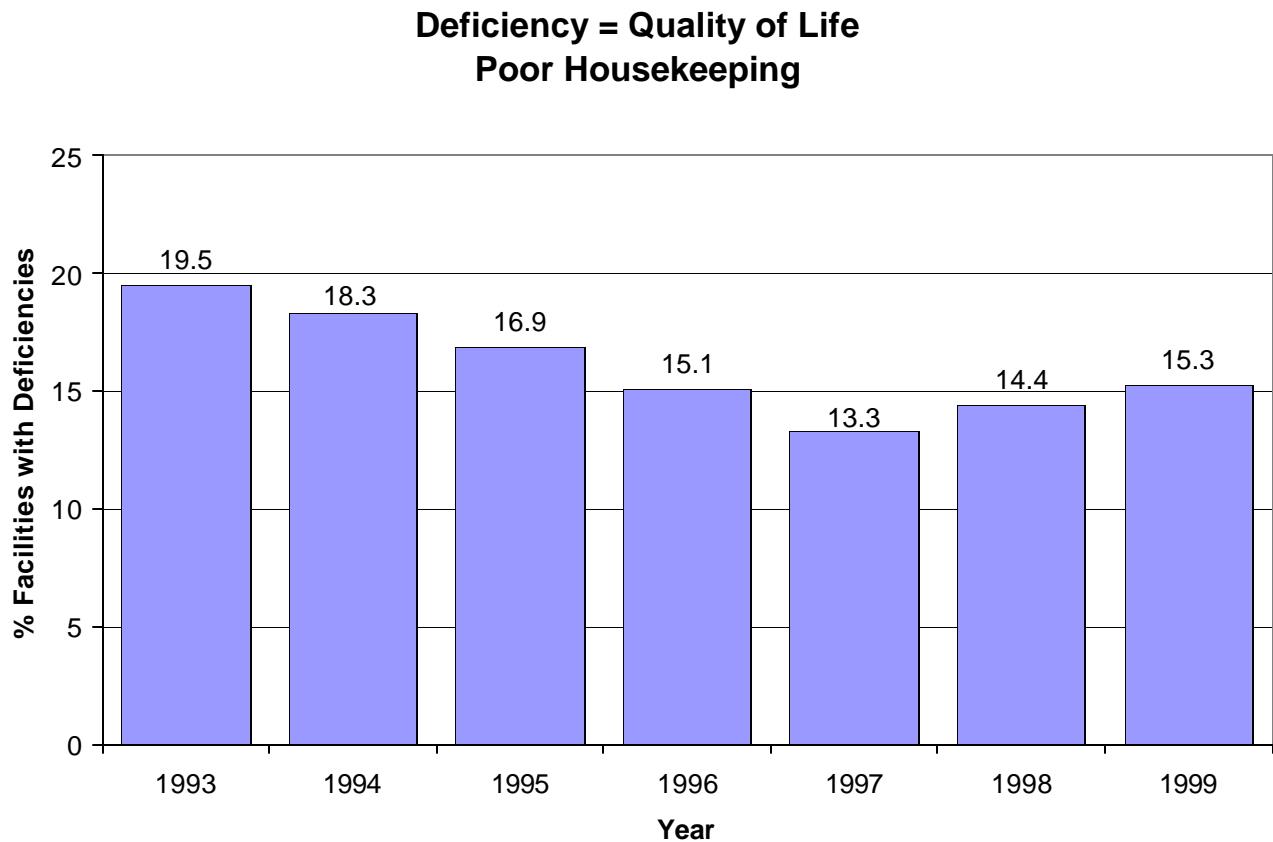


TABLE 38
DEFICIENCY GROUP=QUALITY OF LIFE
HOUSEKEEPING (F253)

Percent of Facilities with Deficiencies							
State	1993	1994	1995	1996	1997	1998	1999
AK	8.3	14.3	7.7	0.0	7.1	7.1	7.1
AL	8.2	6.4	5.1	5.3	0.5	3.7	6.1
AR	15.1	21.5	31.9	39.5	40.0	36.4	45.6
AZ	5.9	14.8	17.9	33.1	34.7	27.9	10.3
CA	38.0	34.9	23.6	26.0	25.1	28.8	31.3
CO	24.0	7.6	4.9	4.7	15.4	16.5	25.1
CT	4.5	0.0	0.0	2.6	2.4	4.0	4.2
DC	40.0	77.8	76.9	61.1	50.0	64.3	35.7
DE	8.1	4.7	6.1	0.0	0.0	0.0	11.8
FL	10.0	10.2	11.8	8.0	13.9	13.3	9.1
GA	15.9	23.1	16.7	17.6	16.1	24.3	25.8
HI	16.0	7.7	0.0	2.5	2.4	9.1	5.1
IA	8.5	9.3	4.4	7.7	9.8	8.1	7.2
ID	21.5	9.0	18.8	24.3	23.4	30.4	34.6
IL	23.4	24.0	27.8	26.1	25.7	23.7	24.1
IN	6.1	13.6	17.0	25.3	10.6	5.6	3.6
KS	63.1	40.7	38.2	30.2	16.8	13.5	16.1
KY	3.9	6.6	10.7	3.2	6.9	25.7	27.0
LA	33.2	22.3	20.5	6.7	7.4	7.4	5.1
MA	6.0	5.1	5.2	2.7	1.7	0.2	4.6
MD	2.1	4.5	5.4	5.8	6.0	3.5	3.7
ME	7.2	11.5	10.4	6.4	9.6	7.6	8.8
MI	45.3	42.0	43.2	30.2	30.3	33.5	34.6
MN	16.4	15.3	8.2	1.4	2.6	4.7	1.3
MO	17.1	9.5	12.5	10.7	10.4	5.4	3.7
MS	25.0	35.8	28.1	23.7	13.9	29.0	47.8
MT	13.7	18.8	11.0	4.3	3.2	4.3	3.1
NC	10.3	8.1	9.6	14.8	10.8	9.9	14.6
ND	5.0	4.9	10.8	23.0	16.0	14.8	2.3
NE	7.8	5.4	5.8	3.9	1.3	3.0	4.8
NH	3.0	4.5	8.3	10.0	5.3	6.7	7.6
NJ	7.6	10.5	11.2	6.3	3.8	2.9	1.9
NM	13.0	1.3	0.0	1.3	3.2	10.6	6.5
NV	25.8	30.0	33.3	25.6	31.6	19.5	7.5
NY	6.9	8.9	8.4	8.4	8.1	5.9	10.3
OH	17.8	21.9	23.0	14.1	6.2	10.2	12.4
OK	2.1	7.9	9.7	11.6	11.0	10.4	19.2
OR	16.7	12.7	10.0	5.2	8.6	3.2	2.1
PA	17.5	12.5	10.2	5.4	4.3	7.1	6.4
RI	3.9	16.3	8.5	5.8	12.0	21.3	16.3
SC	4.4	0.0	1.9	7.3	11.4	17.2	22.4
SD	8.3	3.8	2.7	4.0	5.9	15.1	24.7
TN	22.5	19.8	18.3	18.5	12.6	20.1	19.3
TX	30.8	31.8	27.9	24.0	22.8	22.4	21.0
UT	17.0	6.7	11.8	10.1	7.7	2.2	5.4
VA	16.0	12.5	7.6	7.9	2.1	0.9	1.2
VT	9.8	5.6	7.5	0.0	0.0	2.9	4.8
WA	43.0	31.2	25.3	25.8	25.7	33.2	40.8
WI	14.0	14.7	13.3	12.6	7.5	6.2	7.1
WV	72.5	35.2	28.4	0.9	2.6	2.9	2.2
WY	10.7	2.9	21.1	5.4	8.3	5.0	2.8
US	19.5	18.3	16.9	15.1	13.3	14.4	15.3

Activities of Daily Living Services (F312)

Residents who are unable to carry out activities of daily living (ADL) are given the necessary services to maintain nutrition, grooming, and personal and oral hygiene. In 1993, 7.6 percent of facilities were given deficiencies for this violation compared with 14.0 percent of facilities in 1999 (See Table 39). This represents an 84 percent increase in ADL violations since 1993.

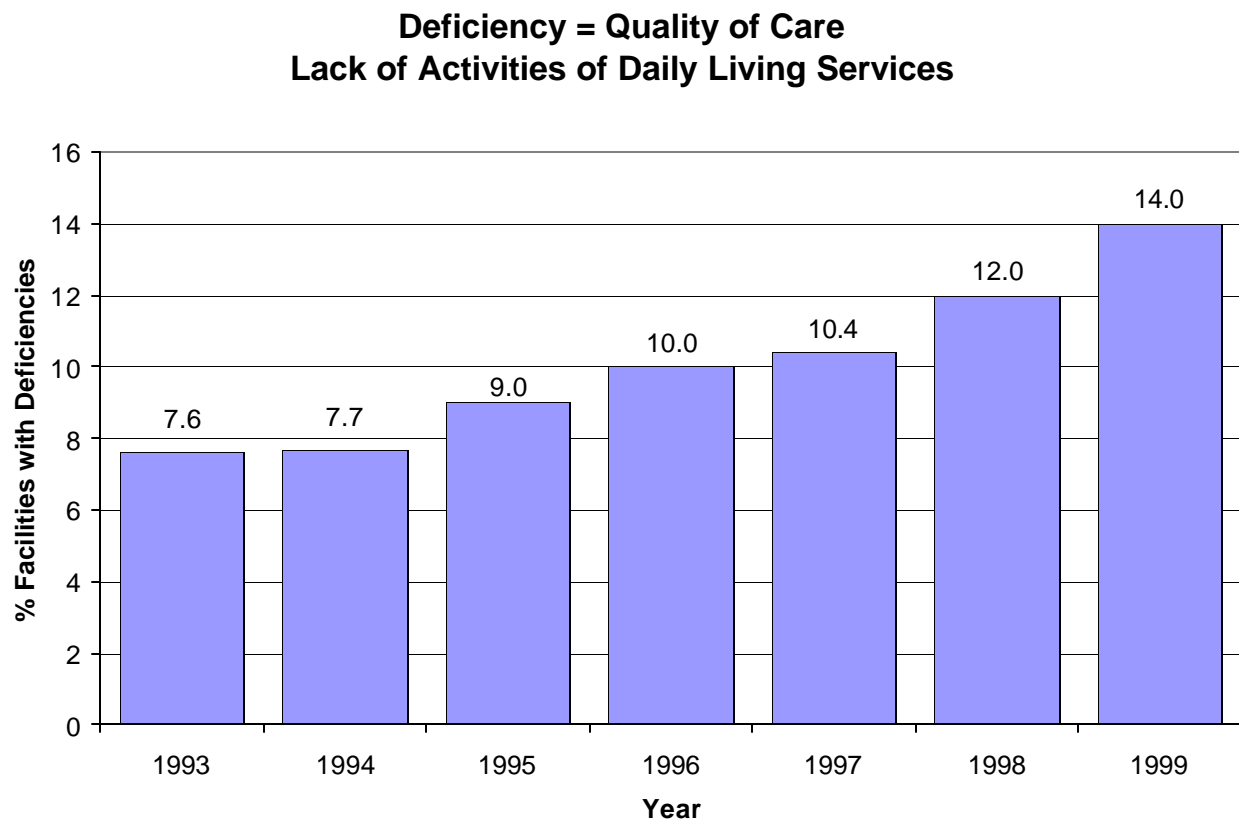


TABLE 39
DEFICIENCY GROUP=QUALITY OF CARE
ACTIVITIES OF DAILY LIVING SERVICES (F312)

Percent of Facilities with Deficiencies							
State	1993	1994	1995	1996	1997	1998	1999
AK	0.0	0.0	0.0	6.3	7.1	7.1	21.4
AL	3.6	11.3	8.1	12.5	12.8	7.9	32.8
AR	10.5	5.4	15.8	25.4	22.4	25.0	18.9
AZ	0.8	7.4	8.0	5.6	4.2	8.5	10.3
CA	17.0	13.4	12.4	13.9	17.7	21.5	22.0
CO	8.0	2.0	5.4	8.4	7.7	7.1	10.5
CT	5.3	2.4	14.7	12.7	3.6	7.6	8.0
DC	6.7	11.1	0.0	0.0	0.0	0.0	0.0
DE	0.0	9.3	15.2	5.4	2.4	14.8	5.9
FL	3.8	4.7	6.2	6.8	5.8	6.2	6.2
GA	6.2	11.5	14.4	14.7	11.7	15.4	21.1
HI	0.0	0.0	0.0	2.5	0.0	2.3	0.0
IA	3.2	5.8	6.6	6.5	10.3	8.1	16.1
ID	29.2	15.4	10.0	18.9	15.6	15.2	15.4
IL	8.5	8.5	11.1	8.6	9.7	13.2	17.9
IN	3.0	3.8	8.0	7.6	12.8	18.0	17.1
KS	7.0	5.8	6.2	16.1	18.5	19.8	26.4
KY	6.9	3.1	6.4	3.9	5.8	9.9	11.0
LA	6.4	2.6	2.4	2.4	3.0	2.7	8.3
MA	4.2	4.1	4.5	4.1	2.6	5.5	3.5
MD	0.5	0.5	6.5	1.9	0.9	1.8	2.2
ME	4.0	0.0	0.9	0.8	1.6	1.7	1.8
MI	21.8	23.5	25.4	29.4	25.9	22.6	23.9
MN	3.7	5.1	4.7	12.0	7.0	10.7	11.7
MO	12.6	11.3	11.9	14.4	17.9	18.6	23.2
MS	6.1	6.2	4.5	2.1	2.5	2.5	1.6
MT	20.0	22.9	19.0	17.2	15.8	31.5	34.0
NC	6.3	6.2	6.7	15.6	14.5	17.1	25.1
ND	10.0	6.2	4.8	17.2	21.3	30.7	18.4
NE	6.4	1.8	4.4	9.6	6.4	10.0	19.6
NH	0.0	3.0	0.0	2.9	2.7	2.7	3.0
NJ	2.7	1.4	0.7	2.3	1.7	1.3	3.4
NM	0.0	0.0	5.2	8.9	3.2	13.6	7.8
NV	0.0	17.5	16.7	23.1	18.4	24.4	15.0
NY	3.8	3.9	5.7	5.2	6.2	6.5	9.4
OH	5.6	8.7	10.5	11.2	10.7	14.9	13.7
OK	6.3	8.2	12.0	13.7	16.4	13.8	19.9
OR	8.3	4.7	8.0	16.9	13.8	8.4	10.6
PA	6.5	5.9	3.3	3.0	3.1	5.6	5.3
RI	2.6	3.3	1.2	0.0	10.9	4.5	7.6
SC	0.0	0.7	1.3	4.8	4.0	2.5	3.4
SD	0.9	0.9	1.8	2.0	2.0	8.1	4.7
TN	5.2	5.0	3.7	4.0	3.8	7.4	7.8
TX	12.9	14.8	15.2	9.9	10.8	10.5	11.5
UT	1.1	1.1	10.5	22.8	12.1	9.0	8.1
VA	0.8	1.9	3.8	7.5	8.9	9.5	6.5
VT	2.4	5.6	10.0	5.4	5.4	11.8	4.8
WA	15.2	11.2	16.0	21.7	24.3	19.2	27.5
WI	5.6	2.3	5.3	3.9	4.8	8.5	8.3
WV	6.3	10.2	4.5	7.3	11.5	4.3	12.7
WY	25.0	52.9	50.0	29.7	55.6	42.5	27.8
US	7.6	7.7	9.0	10.0	10.4	12.0	14.0

Pressure Sores (F314)

Facilities must ensure that residents without pressure sores do not develop them if avoidable. In 1993, 18.0 percent of facilities received deficiencies for failing to meet this standard (See Table 40). Although violations for pressure sores have fluctuated since 1993, the ratio of facilities cited for this violation returned to 18.0 percent in 1999.

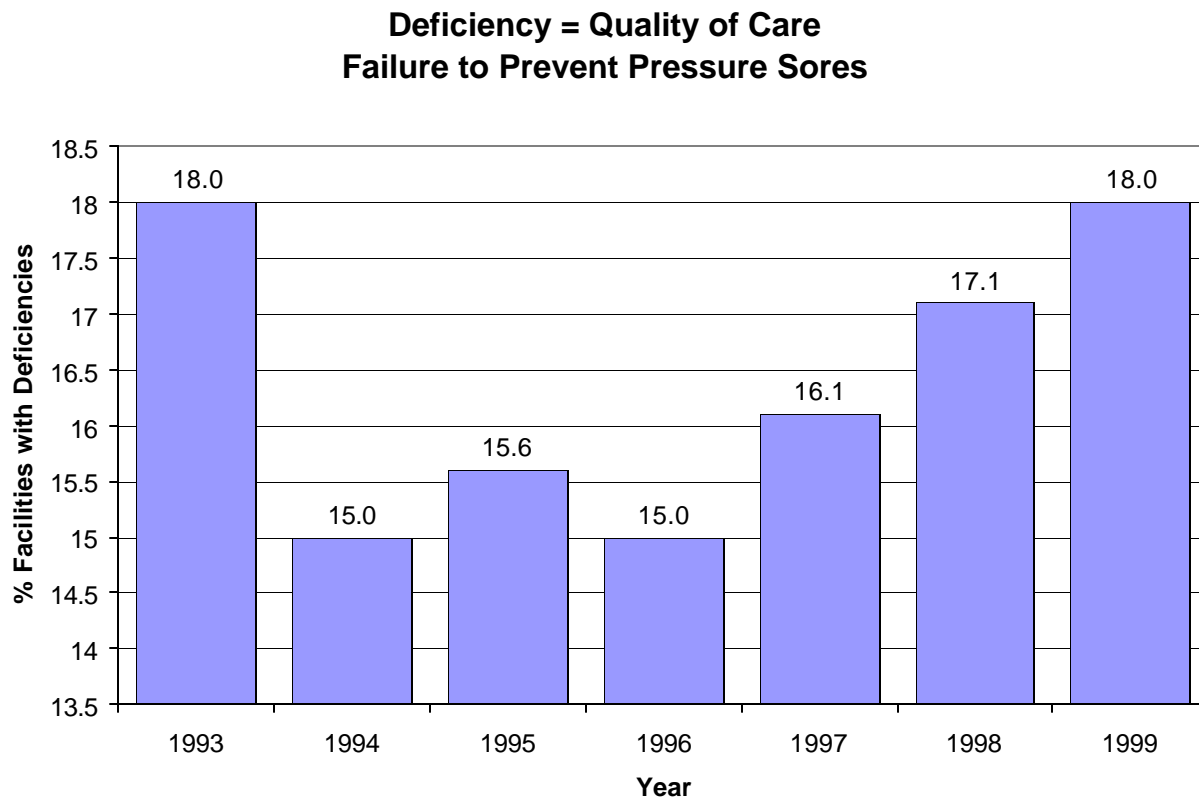


TABLE 40
DEFICIENCY GROUP=QUALITY OF CARE
PRESSURE SORES (F314)

Percent of Facilities with Deficiencies							
State	1993	1994	1995	1996	1997	1998	1999
AK	0.0	14.3	15.4	0.0	0.0	0.0	14.3
AL	20.6	25.1	22.7	22.6	52.0	23.1	24.2
AR	18.4	15.3	25.0	29.3	28.6	22.0	22.6
AZ	2.5	5.2	2.7	4.2	3.4	13.2	19.5
CA	28.2	23.2	19.1	20.5	22.6	24.4	26.9
CO	12.0	7.6	14.3	18.9	11.1	10.4	10.0
CT	15.2	16.5	21.5	12.3	19.4	23.1	18.5
DC	26.7	22.2	15.4	22.2	13.6	7.1	7.1
DE	35.1	14.0	9.1	13.5	45.2	18.5	17.6
FL	11.4	10.7	10.5	14.5	15.6	20.5	13.2
GA	16.2	13.6	9.1	9.6	8.7	9.7	13.4
HI	12.0	15.4	14.3	7.5	16.7	25.0	17.9
IA	22.7	20.4	25.5	21.2	17.0	13.6	13.2
ID	32.3	23.1	21.3	5.4	19.5	25.3	24.4
IL	14.5	10.9	12.7	14.0	21.5	25.1	27.8
IN	13.8	14.4	11.7	18.0	12.8	18.7	17.3
KS	21.6	17.2	20.3	30.5	23.4	28.8	26.4
KY	16.3	6.2	10.3	3.9	7.7	13.8	18.4
LA	21.3	14.8	14.7	8.2	8.9	10.9	10.8
MA	12.5	14.3	9.7	6.6	7.6	10.3	9.8
MD	13.3	10.5	18.8	8.2	10.7	9.9	15.7
ME	5.6	7.6	9.6	5.6	5.6	4.2	7.0
MI	44.3	35.2	37.4	35.8	35.5	30.7	31.6
MN	13.3	7.9	11.8	11.5	7.2	14.2	14.0
MO	28.4	17.7	18.3	13.2	12.8	15.0	20.9
MS	20.7	18.5	24.1	14.2	18.9	16.5	18.7
MT	22.1	20.8	25.0	17.2	18.9	16.3	35.1
NC	14.0	9.8	9.8	9.0	5.8	12.7	15.1
ND	12.6	21.0	15.7	24.1	30.7	21.6	26.4
NE	24.2	15.4	16.8	19.7	11.2	17.8	13.5
NH	1.5	1.5	6.9	20.0	17.3	16.0	22.7
NJ	12.5	5.4	10.9	4.7	5.1	5.9	6.8
NM	15.9	14.3	16.9	6.3	4.8	10.6	3.9
NV	45.2	37.5	41.7	17.9	23.7	26.8	25.0
NY	12.4	5.9	13.7	12.2	12.6	12.2	20.1
OH	25.2	24.7	23.5	18.0	22.2	20.9	22.2
OK	11.8	15.0	11.2	11.9	12.0	10.8	10.7
OR	21.8	10.7	15.3	22.1	19.1	15.5	32.4
PA	9.9	10.7	10.2	11.5	10.7	16.1	16.0
RI	1.3	14.1	8.5	7.0	9.8	12.4	10.9
SC	8.9	14.2	14.3	26.1	23.4	29.4	21.1
SD	3.7	6.6	12.6	21.0	6.9	16.3	14.1
TN	19.3	12.8	12.3	13.9	14.4	11.5	13.5
TX	19.7	15.6	14.6	10.3	12.9	12.0	11.0
UT	3.4	6.7	5.3	8.9	6.6	12.4	12.2
VA	8.6	11.0	5.5	13.5	15.6	14.7	14.2
VT	14.6	11.1	15.0	10.8	13.5	11.8	9.5
WA	24.4	16.0	27.1	28.8	31.9	30.3	29.1
WI	7.4	5.4	4.3	7.7	8.8	8.5	11.8
WV	13.8	5.5	6.0	4.5	7.7	2.9	7.5
WY	71.4	47.1	34.2	8.1	13.9	7.5	5.6
US	18.0	15.0	15.6	15.0	16.1	17.1	18.0

Incontinence Care (F316)

Residents who have bladder incontinence must receive appropriate treatment and services to prevent urinary tract infections and to restore as much bladder functioning as possible. In 1993, 11.8 percent of facilities received deficiencies for this standard compared with 11.5 percent in 1999 (See Table 41).

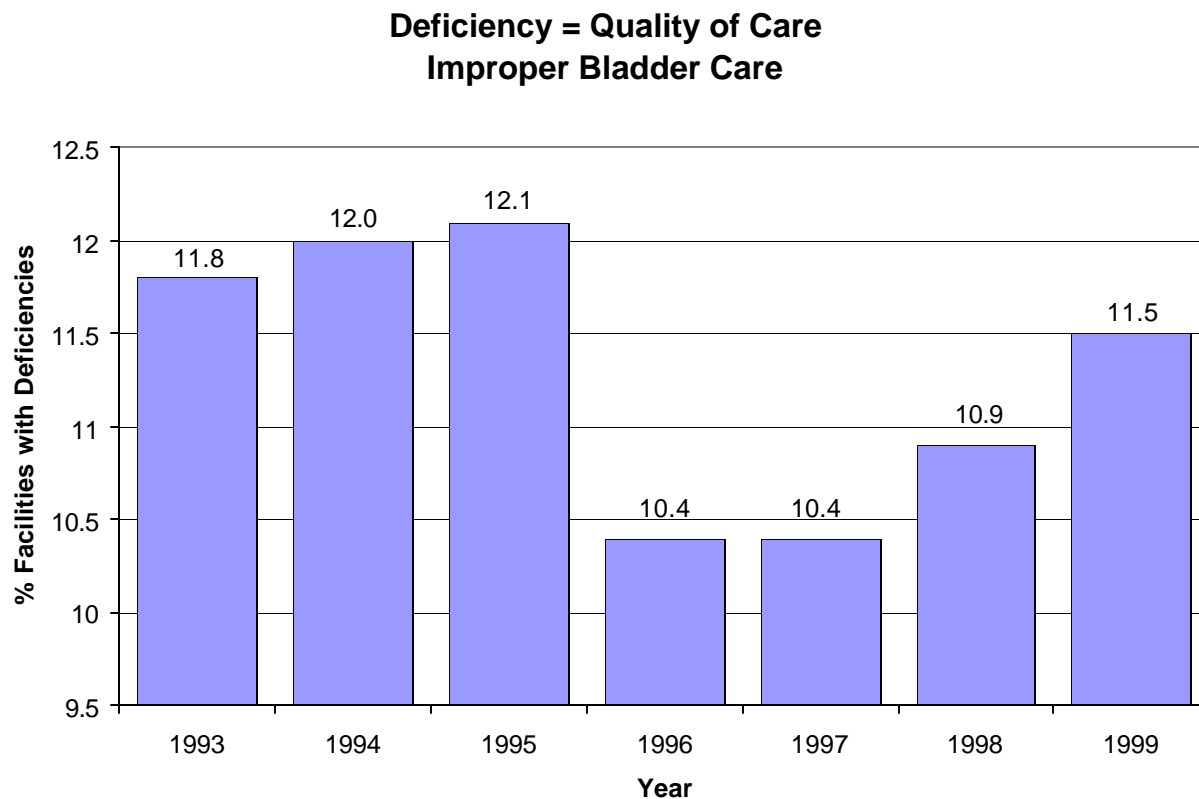


TABLE 41
DEFICIENCY GROUP=QUALITY OF CARE
BLADDER CARE (F316)

Percent of Facilities with Deficiencies							
State	1993	1994	1995	1996	1997	1998	1999
AK	25.0	0.0	0.0	6.3	0.0	0.0	0.0
AL	30.4	47.8	35.4	21.6	29.6	16.7	8.6
AR	16.7	15.7	18.8	21.9	20.8	16.5	15.7
AZ	0.0	0.7	0.9	3.5	1.7	1.6	6.9
CA	14.4	15.5	14.5	14.1	16.9	15.2	18.2
CO	11.5	3.6	4.4	4.2	6.3	4.2	3.2
CT	11.1	3.1	3.6	2.2	2.0	3.6	4.2
DC	0.0	0.0	7.7	0.0	0.0	0.0	0.0
DE	0.0	20.9	12.1	21.6	33.3	51.9	26.5
FL	10.7	14.1	20.7	14.5	14.5	13.3	13.7
GA	20.6	28.4	11.0	4.0	1.7	3.1	12.2
HI	4.0	0.0	7.1	0.0	2.4	4.5	2.6
IA	20.2	15.1	16.3	21.7	16.5	10.7	11.2
ID	9.2	10.3	6.3	6.8	14.3	8.9	11.5
IL	6.5	12.2	16.8	14.8	18.5	19.5	22.9
IN	8.8	16.0	8.4	9.3	6.4	9.4	12.0
KS	14.1	10.0	15.1	21.8	19.3	21.0	28.5
KY	12.4	9.3	13.7	4.3	7.3	16.4	14.2
LA	13.9	9.5	7.0	3.9	3.3	2.7	3.7
MA	15.8	21.2	16.3	9.1	11.0	10.7	13.4
MD	1.6	3.0	4.8	8.2	4.2	5.3	3.7
ME	6.4	9.9	5.2	2.4	0.0	0.8	0.0
MI	28.4	25.5	32.0	31.9	20.4	18.3	18.2
MN	14.8	16.4	16.8	12.0	12.9	23.2	16.5
MO	16.0	8.0	11.3	7.1	4.6	4.0	3.3
MS	20.7	16.7	10.6	5.8	8.5	9.5	12.1
MT	24.2	18.8	18.0	16.1	9.5	10.9	8.2
NC	7.2	17.1	19.9	13.7	14.5	15.3	10.2
ND	10.0	4.9	9.6	19.5	21.3	31.8	34.5
NE	13.2	12.7	6.6	9.2	5.6	7.0	13.5
NH	0.0	4.5	5.6	15.7	4.0	10.7	15.2
NJ	3.8	3.1	3.0	2.0	2.1	2.0	1.9
NM	5.8	1.3	6.5	2.5	1.6	3.0	5.2
NV	16.1	17.5	27.8	28.2	23.7	34.1	35.0
NY	1.7	2.3	1.8	1.4	2.8	0.9	2.0
OH	13.1	12.0	13.9	10.6	11.1	12.4	10.8
OK	3.3	2.9	3.1	3.4	4.2	4.4	4.1
OR	7.1	4.7	6.7	5.2	8.6	0.6	7.0
PA	4.8	4.2	4.8	5.5	5.9	8.4	10.0
RI	10.4	3.3	3.7	5.8	0.0	3.4	2.2
SC	28.1	26.9	24.7	32.7	40.6	42.9	45.6
SD	13.0	5.7	0.9	6.0	6.9	8.1	8.2
TN	13.5	14.8	14.0	10.2	3.8	8.3	4.6
TX	8.6	8.4	8.0	3.8	4.8	7.0	6.8
UT	9.1	13.3	14.5	16.5	2.2	4.5	0.0
VA	0.8	2.7	1.3	5.6	3.4	3.9	6.2
VT	12.2	5.6	10.0	5.4	0.0	2.9	2.4
WA	11.4	11.2	18.6	19.1	22.8	16.6	14.0
WI	9.4	6.7	8.0	5.7	5.0	4.1	5.5
WV	10.0	4.7	0.0	4.5	3.8	5.8	1.5
WY	67.9	85.3	47.4	8.1	30.6	20.0	19.4
US	11.8	12.0	12.1	10.4	10.4	10.9	11.5

Limited Range of Motion Services (F318)

Residents with limited range of motion must receive appropriate treatment and services to increase their range and/or to prevent declines in range of motion. In 1993, 8.3 percent of facilities received deficiencies for violating this requirement compared with 9.7 percent in 1999 (See Table 42).

**Deficiency = Quality of Care
Limited Range of Motion Services**

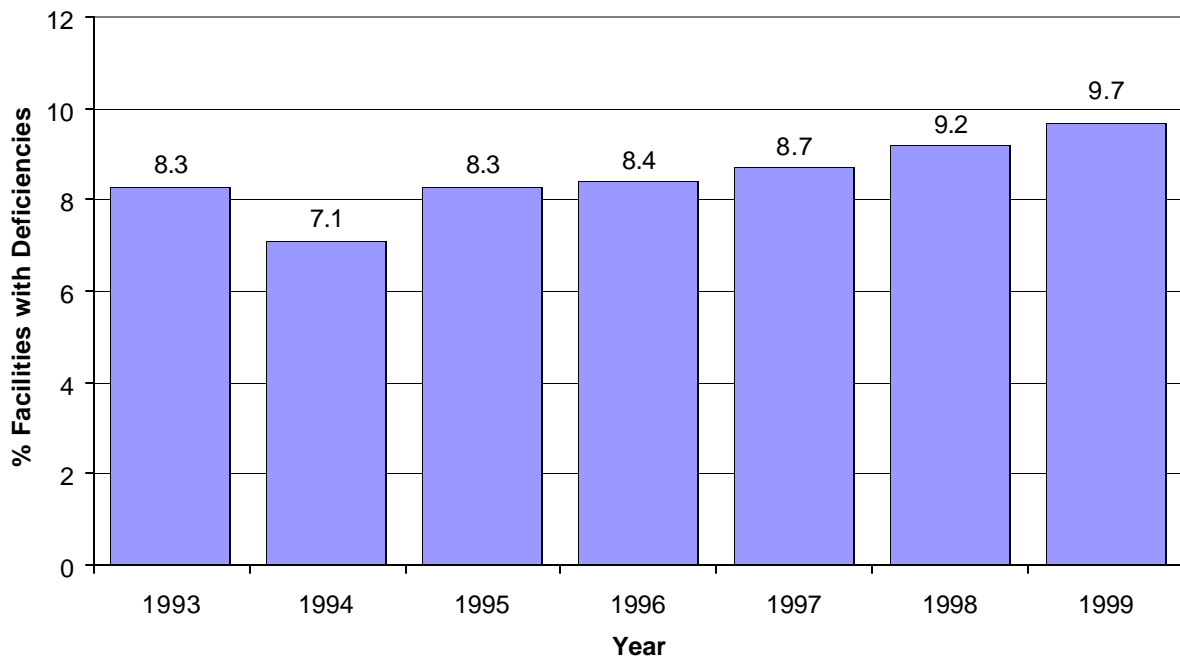


TABLE 42
DEFICIENCY GROUP=QUALITY OF CARE
LIMITED RANGE OF MOTION SERVICES (F318)

Percent of Facilities with Deficiencies							
State	1993	1994	1995	1996	1997	1998	1999
AK	16.7	7.1	7.7	12.5	7.1	7.1	21.4
AL	3.6	3.4	7.1	7.2	8.7	3.7	9.6
AR	6.7	9.1	12.7	16.4	22.0	21.6	15.7
AZ	0.8	2.2	0.9	2.1	1.7	3.9	10.3
CA	14.2	13.0	11.8	13.0	15.2	14.7	13.8
CO	15.0	8.6	4.9	3.7	5.3	6.1	9.6
CT	4.1	3.9	6.4	3.5	3.2	4.4	5.9
DC	0.0	5.6	0.0	0.0	0.0	0.0	0.0
DE	13.5	2.3	12.1	0.0	4.8	18.5	11.8
FL	0.9	1.9	3.5	3.6	4.2	6.1	4.5
GA	9.1	8.0	10.2	8.2	5.4	8.3	11.0
HI	32.0	7.7	9.5	2.5	2.4	0.0	7.7
IA	18.1	13.2	9.2	13.1	13.8	14.3	13.6
ID	18.5	15.4	7.5	9.5	14.3	16.5	14.1
IL	5.4	9.7	11.9	12.4	12.8	11.2	11.1
IN	21.3	16.2	15.7	14.3	11.5	15.0	12.4
KS	10.8	8.0	11.0	13.6	11.1	14.3	19.7
KY	3.9	1.2	7.3	1.8	5.4	13.5	7.1
LA	5.1	4.6	7.0	3.3	5.6	3.5	5.1
MA	3.7	2.9	3.1	5.6	3.4	2.1	3.7
MD	1.1	0.0	3.8	1.0	1.9	4.7	5.2
ME	1.6	1.5	1.7	0.0	0.0	0.8	1.8
MI	27.9	21.6	26.2	25.1	22.4	16.0	16.7
MN	8.0	8.5	9.7	7.3	10.1	13.2	13.5
MO	13.7	7.2	8.9	8.9	5.5	7.8	8.3
MS	7.9	8.0	7.0	7.4	5.0	10.5	14.3
MT	17.9	16.7	11.0	11.8	11.6	8.7	21.6
NC	1.7	3.5	6.0	7.4	7.4	11.7	15.9
ND	2.5	0.0	3.6	2.3	4.0	6.8	5.7
NE	15.5	9.0	8.8	7.9	8.6	3.5	7.0
NH	0.0	3.0	0.0	1.4	5.3	5.3	3.0
NJ	0.0	0.7	0.7	0.7	0.3	1.0	1.5
NM	5.8	5.2	1.3	0.0	3.2	0.0	5.2
NV	12.9	17.5	11.1	5.1	18.4	4.9	7.5
NY	4.0	4.3	8.2	9.7	11.1	8.7	12.0
OH	11.6	7.7	9.5	11.1	8.4	10.3	9.7
OK	11.5	7.9	11.0	10.6	14.6	12.5	9.6
OR	5.8	0.7	10.0	13.6	9.2	6.5	8.5
PA	3.7	3.0	4.2	6.1	5.7	7.6	5.7
RI	1.3	2.2	3.7	1.2	10.9	10.1	4.3
SC	3.0	1.5	3.2	4.2	15.4	12.3	11.6
SD	3.7	2.8	0.9	0.0	5.0	2.3	5.9
TN	3.8	6.7	5.7	5.6	5.6	6.6	5.5
TX	5.7	5.5	5.5	4.3	5.5	5.5	8.6
UT	2.3	1.1	3.9	3.8	2.2	10.1	10.8
VA	0.4	1.5	1.3	2.4	3.0	4.8	5.8
VT	14.6	11.1	12.5	0.0	0.0	5.9	2.4
WA	8.0	10.4	15.2	11.6	12.0	10.0	12.5
WI	7.1	3.9	5.5	7.5	6.0	8.5	6.5
WV	2.5	5.5	4.5	2.7	1.3	1.4	0.7
WY	32.1	26.5	13.2	2.7	5.6	0.0	5.6
US	8.3	7.1	8.3	8.4	8.7	9.2	9.7

Accident Environment (F323)

Facilities must ensure that the environment is as free of accident hazards as possible. This is designed to prevent unexpected and unintended injury. In 1993, 19.7 percent of facilities received deficiencies for failing to meet this standard (See Table 43). In 1999, 18.7 percent of facilities received deficiencies for this requirement.

**Deficiency = Quality of Care
Accident Hazards in the Environment**

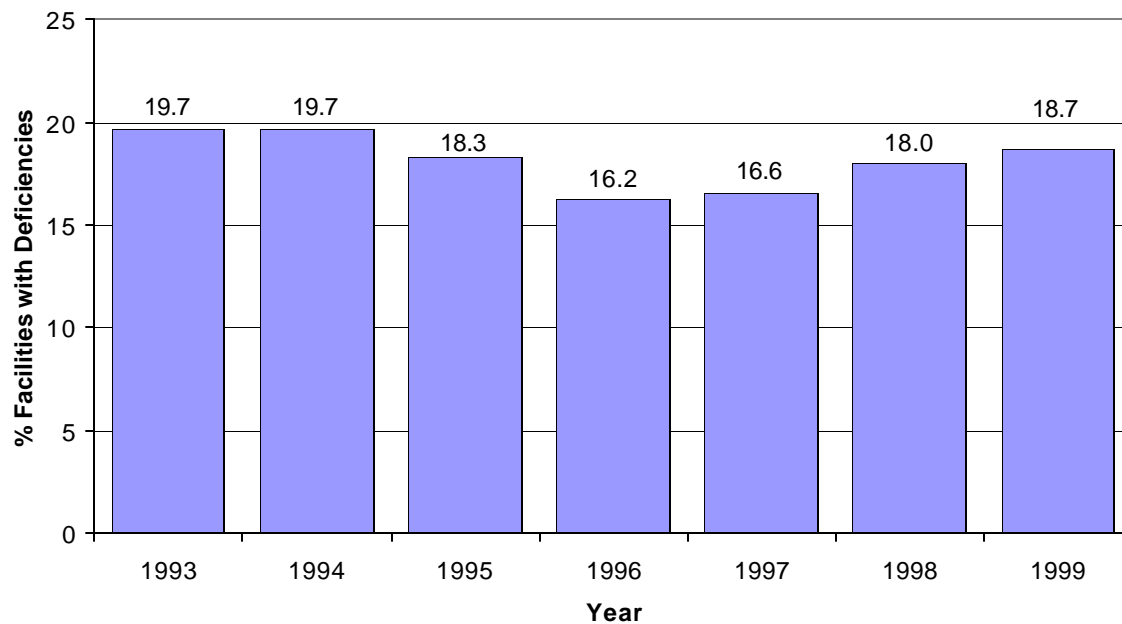


TABLE 43
DEFICIENCY GROUP=QUALITY OF CARE
ACCIDENT ENVIRONMENT (F323)

Percent of Facilities with Deficiencies							
State	1993	1994	1995	1996	1997	1998	1999
AK	0.0	0.0	23.1	0.0	14.3	7.1	0.0
AL	14.9	24.6	19.2	15.9	13.8	11.6	22.2
AR	23.8	26.0	30.0	35.9	24.7	23.3	24.4
AZ	8.5	18.5	24.1	44.4	43.2	36.4	25.3
CA	32.5	35.9	26.0	27.8	28.8	31.7	33.0
CO	32.5	26.9	17.7	17.9	18.8	17.0	16.0
CT	11.5	7.1	6.0	2.6	1.2	4.4	3.8
DC	13.3	0.0	23.1	11.1	4.5	14.3	21.4
DE	18.9	20.9	27.3	45.9	31.0	22.2	14.7
FL	5.8	7.1	8.8	8.4	9.5	10.8	10.2
GA	18.9	18.3	19.3	13.0	10.4	17.4	19.6
HI	4.0	3.8	4.8	0.0	7.1	9.1	7.7
IA	10.6	10.9	6.8	11.0	17.4	20.8	21.1
ID	16.9	9.0	6.3	25.7	16.9	24.1	14.1
IL	39.0	40.5	36.9	30.1	33.9	30.2	34.8
IN	13.5	18.8	24.1	29.6	37.6	35.6	34.4
KS	29.7	17.7	21.5	27.7	23.9	24.3	30.3
KY	5.0	1.5	4.3	2.5	7.7	16.4	21.6
LA	13.9	11.5	9.5	4.8	5.9	6.5	6.8
MA	13.9	9.6	8.1	2.9	2.5	2.3	3.9
MD	8.5	10.5	9.7	4.8	5.1	8.8	6.0
ME	20.0	19.8	15.7	8.8	17.6	15.3	21.1
MI	17.4	20.1	34.7	30.9	33.7	35.8	40.3
MN	17.6	15.0	15.0	5.3	3.9	12.7	6.6
MO	15.5	8.2	8.3	8.7	7.3	8.4	8.7
MS	31.1	34.6	34.2	26.3	24.4	32.5	46.2
MT	20.0	26.0	10.0	18.3	5.3	8.7	4.1
NC	4.6	6.2	6.0	8.5	8.7	9.9	12.9
ND	6.3	0.0	2.4	1.1	2.7	6.8	2.3
NE	8.7	11.3	8.4	7.0	8.2	10.4	9.6
NH	12.1	10.4	5.6	8.6	2.7	5.3	4.5
NJ	1.9	5.8	4.0	3.0	2.1	4.2	1.0
NM	27.5	31.2	11.7	6.3	1.6	13.6	22.1
NV	9.7	22.5	19.4	25.6	7.9	22.0	25.0
NY	10.3	8.7	11.9	10.0	6.6	5.9	11.8
OH	30.9	31.0	32.9	25.8	22.7	21.5	22.3
OK	3.9	9.1	10.7	5.8	6.5	6.4	10.7
OR	19.9	12.0	14.0	8.4	14.5	8.4	7.7
PA	15.0	18.0	12.7	12.3	12.3	14.4	14.0
RI	18.2	6.5	6.1	9.3	12.0	15.7	8.7
SC	28.1	23.1	13.6	21.2	23.4	23.9	23.8
SD	25.9	29.2	26.1	15.0	30.7	34.9	30.6
TN	21.5	15.8	20.7	12.0	11.1	17.5	21.9
TX	24.5	25.4	20.4	13.3	13.3	14.0	13.5
UT	35.2	36.7	26.3	30.4	30.8	28.1	13.5
VA	3.7	10.3	11.8	10.7	8.0	2.2	4.6
VT	22.0	5.6	12.5	5.4	2.7	2.9	9.5
WA	41.8	32.0	27.9	27.0	27.9	33.6	30.9
WI	15.2	18.3	16.5	9.8	16.3	21.5	13.9
WV	67.5	48.4	31.3	4.5	9.0	2.9	6.7
WY	32.1	26.5	15.8	13.5	22.2	37.5	36.1
US	19.7	19.7	18.3	16.2	16.6	18.0	18.7

Nutrition (F325)

Facilities must ensure that residents receive acceptable nutrition to maintain body weight unless a resident's condition makes this impossible. In the 1993, 9.4 percent of facilities failed to meet this standard compared with 9.9 in 1999 (See Table 44).

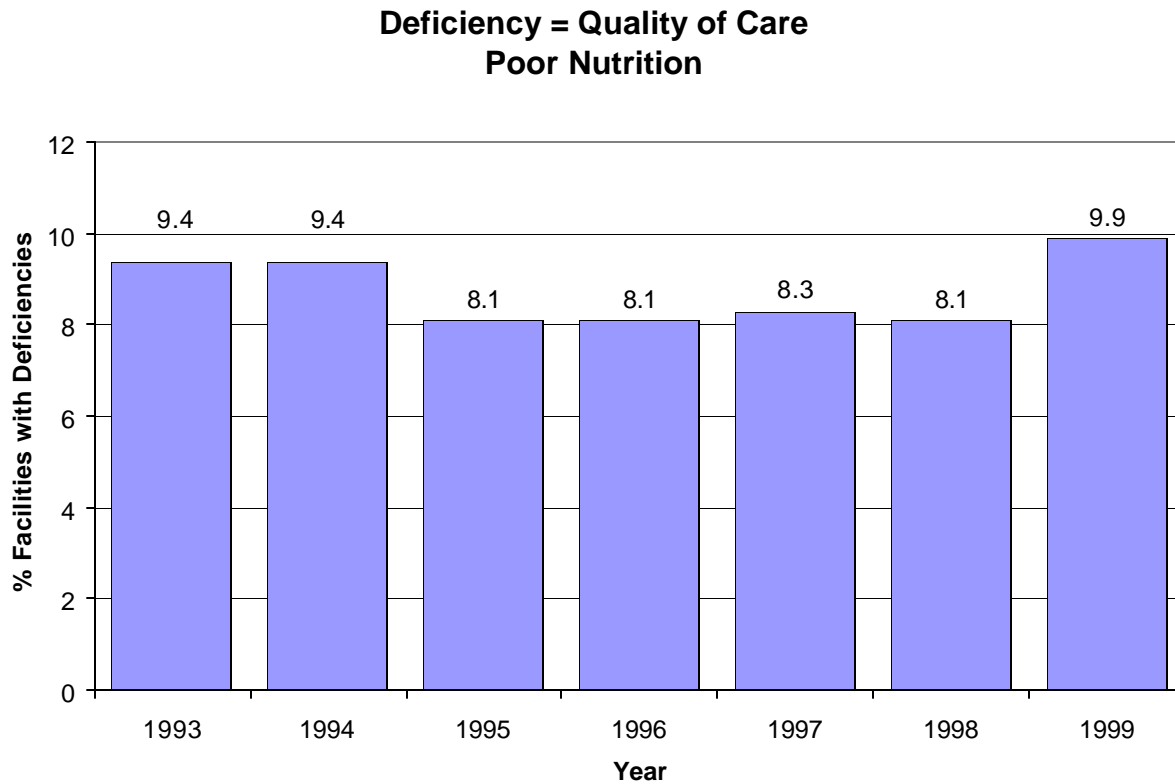


TABLE 44
DEFICIENCY GROUP=QUALITY OF CARE
NUTRITION (F325)

Percent of Facilities with Deficiencies							
State	1993	1994	1995	1996	1997	1998	1999
AK	0.0	0.0	0.0	0.0	7.1	7.1	0.0
AL	12.9	14.8	15.2	13.9	11.7	6.0	7.6
AR	15.5	26.9	10.0	15.6	16.1	15.3	21.2
AZ	0.0	2.2	2.7	2.1	0.8	3.9	4.6
CA	14.3	12.1	11.8	12.0	11.6	12.2	16.8
CO	10.0	4.6	3.9	3.7	5.3	2.4	5.5
CT	3.3	2.0	4.0	1.8	1.2	1.8	3.4
DC	13.3	5.6	0.0	0.0	0.0	0.0	0.0
DE	24.3	16.3	9.1	8.1	19.0	22.2	8.8
FL	9.4	14.3	16.2	16.6	15.5	13.2	13.2
GA	4.4	5.9	5.7	2.8	2.7	2.6	5.6
HI	24.0	19.2	16.7	10.0	23.8	15.9	7.7
IA	3.9	3.9	3.4	2.3	5.4	2.4	4.0
ID	16.9	15.4	12.5	13.5	13.0	13.9	7.7
IL	5.4	6.2	4.9	5.3	7.8	10.4	8.6
IN	5.0	8.0	5.9	10.0	9.9	10.0	10.2
KS	7.4	8.3	8.5	13.6	12.8	12.3	14.2
KY	3.5	4.2	3.0	4.3	8.5	15.5	16.0
LA	13.9	9.8	7.3	4.5	5.9	5.3	4.6
MA	7.5	5.9	7.4	5.6	4.2	4.6	5.6
MD	11.6	12.0	15.6	8.7	11.6	6.4	3.7
ME	2.4	3.1	3.5	0.0	0.0	2.5	1.8
MI	19.2	17.7	21.9	27.3	19.0	19.0	21.4
MN	7.0	2.5	1.8	1.7	1.3	1.0	2.8
MO	11.0	9.7	5.6	10.1	9.3	4.8	8.9
MS	27.4	25.9	13.6	7.9	10.4	4.5	8.2
MT	20.0	12.5	13.0	10.8	13.7	13.0	26.8
NC	5.5	7.3	5.2	5.7	3.2	7.0	8.6
ND	3.8	1.2	1.2	2.3	14.7	22.7	14.9
NE	10.0	11.3	6.6	8.3	5.6	10.9	9.1
NH	1.5	7.5	6.9	10.0	5.3	10.7	12.1
NJ	11.4	6.5	8.6	5.0	5.1	2.9	6.3
NM	1.4	1.3	11.7	3.8	0.0	0.0	6.5
NV	38.7	27.5	30.6	10.3	21.1	22.0	22.5
NY	2.7	4.6	3.8	6.3	3.0	2.0	6.3
OH	10.4	12.7	8.8	7.0	6.2	5.1	4.4
OK	20.2	22.9	19.1	10.6	15.9	13.8	8.2
OR	12.8	4.7	9.3	9.1	9.2	9.7	16.2
PA	8.3	13.9	6.1	7.8	8.1	7.5	13.9
RI	3.9	1.1	1.2	0.0	1.1	3.4	4.3
SC	17.0	8.2	5.2	7.9	12.6	12.9	12.9
SD	11.1	10.4	13.5	13.0	6.9	8.1	4.7
TN	9.3	8.1	6.3	7.7	4.1	7.7	9.2
TX	9.3	8.9	7.8	6.6	7.8	7.6	10.1
UT	4.5	2.2	7.9	11.4	3.3	7.9	0.0
VA	5.7	4.9	5.5	5.6	5.1	4.8	6.2
VT	7.3	11.1	0.0	0.0	8.1	5.9	2.4
WA	11.8	7.1	7.1	11.2	17.4	18.5	24.2
WI	1.5	0.8	0.8	3.6	2.5	3.1	6.8
WV	7.5	6.3	7.5	1.8	0.0	1.4	2.2
WY	25.0	20.6	10.5	0.0	11.1	5.0	13.9
US	9.4	9.4	8.1	8.1	8.3	8.1	9.9

Sufficient Nursing Staff (F353)

Facilities must have sufficient nursing staff to provide nursing and related services to attain or maintain the highest practicable physical, mental, and psychosocial well-being of residents. In 1993, 6.2 percent of facilities were given deficiencies for failing to meet this requirement compared with 5.7 percent in 1999 (See Table 45).

Deficiency = Nursing Services Insufficient Nursing Staff

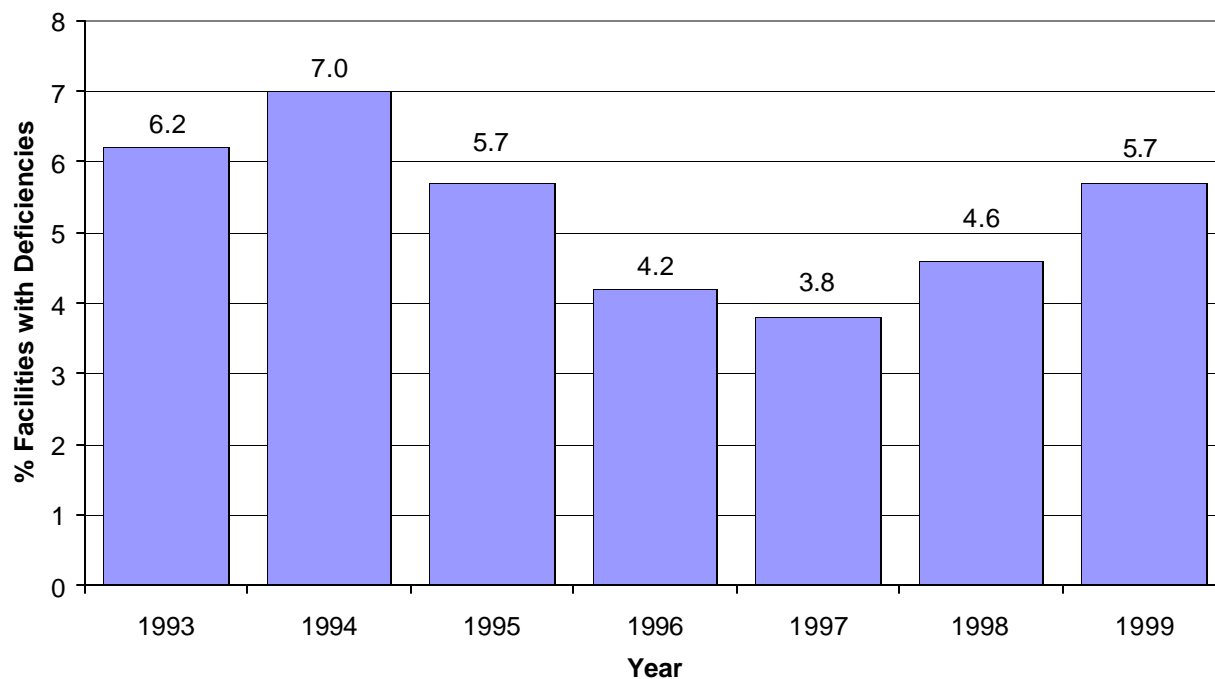


TABLE 45
DEFICIENCY GROUP=NURSING SERVICES
SUFFICIENT NURSING STAFF (F353)

Percent of Facilities with Deficiencies							
State	1993	1994	1995	1996	1997	1998	1999
AK	0.0	0.0	0.0	0.0	7.1	0.0	0.0
AL	3.6	13.3	14.6	14.4	11.2	6.9	14.1
AR	5.0	10.7	9.6	2.3	5.1	3.0	4.1
AZ	1.7	3.7	7.1	1.4	0.0	3.9	3.4
CA	12.1	11.7	8.1	7.6	6.5	5.5	8.6
CO	3.5	2.5	2.0	1.1	0.0	0.5	0.0
CT	1.2	0.4	0.0	0.0	0.4	0.4	0.8
DC	0.0	5.6	7.7	0.0	9.1	0.0	0.0
DE	0.0	2.3	3.0	5.4	9.5	11.1	5.9
FL	5.6	7.1	9.3	10.9	10.8	13.9	12.4
GA	4.7	4.4	5.4	5.1	1.3	4.6	4.2
HI	12.0	42.3	21.4	5.0	4.8	11.4	7.7
IA	5.2	6.3	4.6	3.5	7.4	4.5	4.0
ID	21.5	23.1	11.3	1.4	3.9	7.6	7.7
IL	3.2	2.8	3.0	2.3	2.5	4.9	6.7
IN	11.9	13.6	11.1	10.0	6.8	8.9	7.9
KS	10.8	15.8	11.8	6.5	4.1	3.8	2.6
KY	2.7	3.1	7.3	3.6	1.9	5.6	9.2
LA	7.8	5.2	4.6	3.0	2.4	0.9	2.3
MA	1.6	2.6	1.2	0.4	0.8	1.3	2.8
MD	0.0	0.5	1.1	1.0	1.9	0.0	3.7
ME	3.2	1.5	2.6	0.8	3.2	3.4	0.9
MI	10.3	14.6	15.8	12.9	10.1	12.7	13.9
MN	6.4	7.3	3.2	3.4	2.1	6.5	3.6
MO	11.8	9.3	6.0	3.7	2.6	6.8	11.0
MS	9.7	9.3	9.0	3.2	4.0	3.5	8.2
MT	6.3	11.5	12.0	6.5	5.3	9.8	5.2
NC	7.5	8.7	7.3	5.2	4.5	4.9	5.1
ND	3.8	1.2	6.0	4.6	8.0	4.5	1.1
NE	3.6	4.5	5.3	1.3	1.3	0.4	0.9
NH	3.0	7.5	2.8	4.3	0.0	6.7	6.1
NJ	0.8	1.4	2.6	1.0	0.7	0.7	2.4
NM	8.7	7.8	5.2	1.3	1.6	7.6	7.8
NV	6.4	17.5	16.7	12.8	15.8	12.2	15.0
NY	0.0	0.2	0.0	0.0	0.2	0.2	1.3
OH	4.8	5.3	3.8	2.0	3.2	5.9	4.2
OK	3.6	4.7	3.7	2.6	1.0	1.3	2.1
OR	13.4	7.3	6.0	3.9	3.9	1.9	16.9
PA	2.8	3.5	1.9	1.2	0.9	1.3	2.5
RI	0.0	1.1	0.0	0.0	0.0	1.1	1.1
SC	4.4	9.7	5.8	9.1	8.0	3.1	6.8
SD	5.6	4.7	3.6	1.0	5.9	4.7	5.9
TN	3.4	4.4	4.3	4.3	0.9	2.6	4.0
TX	11.0	11.6	7.7	4.3	4.6	3.9	5.6
UT	3.4	1.1	5.3	2.5	2.2	2.2	4.1
VA	4.5	3.0	3.8	4.4	4.2	3.0	3.1
VT	4.9	0.0	7.5	5.4	0.0	2.9	0.0
WA	3.4	4.1	3.3	4.9	5.4	5.9	8.7
WI	5.4	3.1	1.8	1.3	1.3	3.3	3.8
WV	7.5	5.5	0.0	3.6	1.3	0.0	1.5
WY	21.4	32.4	15.8	5.4	5.6	2.5	8.3
US	6.2	7.0	5.7	4.2	3.8	4.6	5.7

Food Sanitation (F371)

Sanitary conditions must be ensured in storing, preparing, distributing, and serving food to prevent food borne illness. In 1993, 30.4 percent of facilities were given deficiencies for failure to meet this regulation compared to 26.0 percent in 1999 (See Table 46). This represents a decrease of 14 percent since 1993.

Deficiency = Dietary Services Poor Food Sanitation

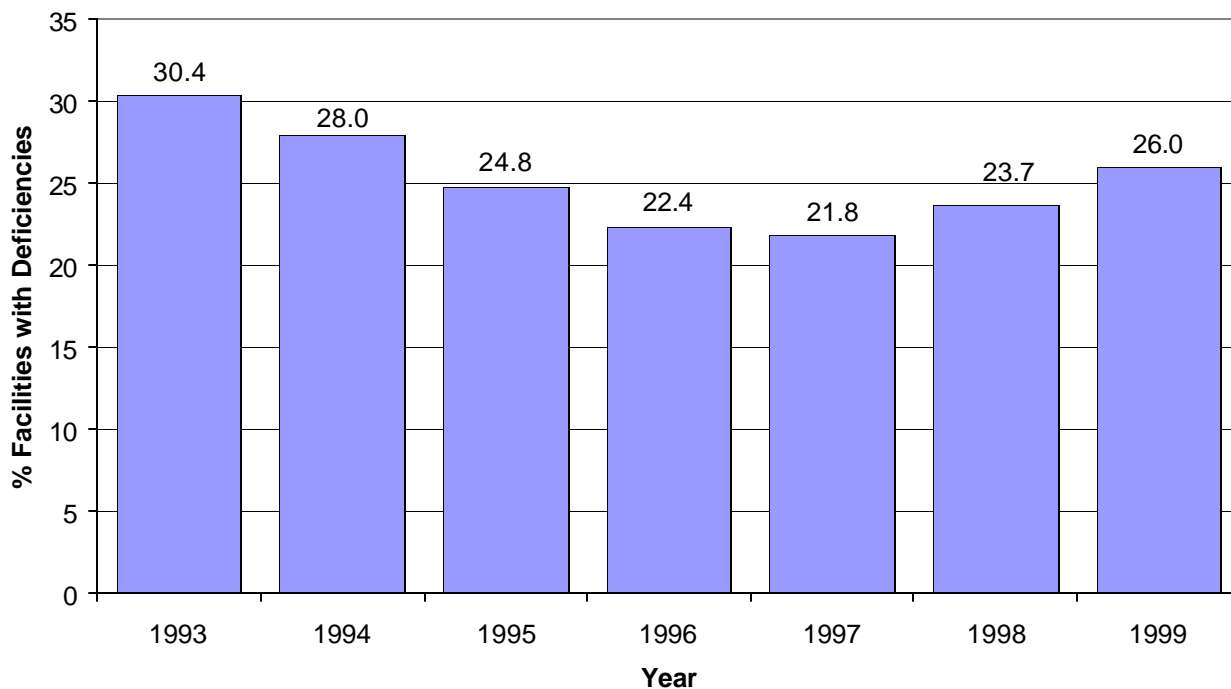


TABLE 46
DEFICIENCY GROUP=DIETARY SERVICES
FOOD SANITATION (F371)

Percent of Facilities with Deficiencies							
State	1993	1994	1995	1996	1997	1998	1999
AK	25.0	14.3	0.0	0.0	14.3	21.4	35.7
AL	25.3	20.7	13.6	24.5	31.6	32.9	45.5
AR	28.0	22.7	26.9	39.5	46.3	41.1	49.3
AZ	10.2	24.4	49.1	51.4	53.4	38.0	39.1
CA	52.2	53.9	42.0	41.9	41.1	39.9	39.1
CO	35.0	10.2	9.9	15.8	15.4	11.3	21.9
CT	28.8	12.2	5.6	3.5	2.4	3.6	8.8
DC	33.3	61.1	61.5	66.7	54.5	78.6	64.3
DE	16.2	37.2	27.3	43.2	21.4	22.2	32.4
FL	30.4	23.9	23.0	21.7	28.5	30.5	32.9
GA	28.3	28.1	29.5	24.4	21.7	30.3	37.1
HI	20.0	26.9	28.6	32.5	23.8	18.2	33.3
IA	27.5	18.1	16.0	18.6	18.7	17.7	20.8
ID	32.3	25.6	20.0	33.8	36.4	48.1	42.3
IL	42.0	39.9	38.0	34.8	32.0	33.9	35.9
IN	17.4	21.2	25.4	28.6	30.7	34.1	31.4
KS	45.1	38.0	28.7	29.7	25.3	23.3	24.9
KY	15.1	11.6	14.5	7.5	10.4	28.3	38.3
LA	29.2	27.5	22.3	26.1	21.7	22.4	22.2
MA	17.0	9.0	10.1	3.5	3.4	5.2	9.3
MD	11.6	20.5	10.8	10.1	13.0	5.8	6.0
ME	16.0	22.1	24.3	20.0	18.4	9.3	14.9
MI	46.3	46.8	47.8	42.3	40.9	46.7	46.0
MN	29.0	32.5	17.9	8.1	3.1	6.7	13.0
MO	28.6	16.1	20.3	20.1	16.1	28.2	24.6
MS	40.2	42.0	30.2	21.1	17.4	18.5	28.6
MT	29.5	29.2	15.0	7.5	6.3	8.7	20.6
NC	27.9	20.6	22.3	18.6	17.4	23.4	27.2
ND	28.8	29.6	19.3	23.0	26.7	22.7	27.6
NE	24.2	16.3	12.4	6.6	8.6	13.5	15.2
NH	12.1	11.9	1.4	8.6	8.0	8.0	18.2
NJ	14.8	13.6	8.6	7.0	5.5	7.2	7.3
NM	20.3	16.9	26.0	5.1	4.8	21.2	20.8
NV	45.2	65.0	61.1	59.0	55.3	65.9	62.5
NY	9.7	7.9	14.8	10.0	6.8	8.1	8.3
OH	40.9	39.2	32.6	24.5	16.4	19.0	26.2
OK	14.8	21.7	17.0	20.3	20.4	15.2	17.9
OR	12.8	14.7	11.3	10.4	11.8	7.1	11.3
PA	18.9	15.4	12.3	9.6	11.2	13.5	16.0
RI	32.5	39.1	28.0	16.3	16.3	29.2	17.4
SC	36.3	29.1	29.9	31.5	44.6	38.0	46.3
SD	31.5	33.0	19.8	13.0	24.8	34.9	42.4
TN	38.4	39.6	41.0	28.7	20.2	31.8	40.1
TX	32.7	35.5	30.8	23.9	23.9	24.2	21.8
UT	39.8	30.0	31.6	25.3	26.4	25.8	29.7
VA	16.8	20.2	17.6	11.9	9.3	6.5	6.2
VT	29.3	44.4	22.5	0.0	5.4	5.9	9.5
WA	43.3	32.0	30.5	31.5	38.4	40.2	43.0
WI	17.3	14.7	8.8	5.1	7.5	12.1	6.0
WV	75.0	32.0	17.9	20.9	28.2	21.7	24.6
WY	71.4	47.1	39.5	24.3	47.2	30.0	30.6
US	30.4	28.0	24.8	22.4	21.8	23.7	26.0

PERCENT OF NURSING FACILITIES IN THE U.S. WITH DEFICIENCIES BY SURVEY CATEGORY

Percent of Deficiencies

This section presents a listing of 185 survey items for each survey category based on the 1995 federal survey categories (excluding the life safety requirements). The percent of facilities in the U.S. with deficiencies are presented for the 1993-1999 period.

Resident Rights

In this category of survey items, the highest percent of deficiencies were given for failure to provide privacy and confidentiality to residents (See Table 47). Only 7 of the 27 items in this category were cited in 2 percent or more of the facilities in the U.S. in 1999.

TABLE 47
PERCENT OF NURSING FACILITIES IN THE U.S. WITH DEFICIENCIES FOR RESIDENT RIGHTS

DEFICIENCY GROUP=RESIDENT RIGHTS

FTAG	DESCRIPTION	1993	1994	1995	1996	1997	1998	1999
F151	Exercise of Rights	1.4	1.6	1.3	1.2	0.8	1.3	1.1
F152	Free of Reprisal	1.7	1.1	0.7	0.7	0.7	0.9	0.9
F153	Access to Records	0.5	0.4	0.3	0.1	0.2	0.2	0.1
F154	Informed of Condition	2.6	2.8	1.7	1.3	1.0	0.9	1.1
F155	Refuse Treatment	1.5	1.6	1.2	1.1	0.9	1.1	1.0
F156	Notice of Rights and Services	12.5	11.0	7.0	4.1	3.4	3.1	3.1
F157	Notice of Changes	6.2	6.4	5.6	5.5	5.7	6.9	7.9
F158	Resident Manage Financial Affairs	0.2	0.2	0.2	0.1	0.1	0.1	0.1
F159	Facility Manage Personal Funds	8.7	5.6	3.9	2.4	2.4	2.4	2.4
F160	Convey Funds	1.5	1.5	1.2	0.5	0.6	0.8	0.8
F161	Financial Security	3.1	2.4	2.3	1.2	0.9	0.9	0.7
F162	Limit on Charges to Funds	0.7	0.7	0.5	0.6	0.5	0.4	0.4
F163	Choice of Physician	0.2	0.2	0.3	0.2	0.2	0.2	0.2
F164	Privacy and Confidentiality	7.7	7.0	7.4	7.2	6.9	7.1	7.2
F165	Voice Grievances	0.5	0.5	0.4	0.3	0.3	0.2	0.3
F166	Resolve Grievances	3.6	3.7	3.8	3.1	2.9	3.1	3.5
F167	Survey Results	6.8	7.1	6.1	4.0	2.7	3.4	3.6
F168	Information	0.2	0.2	0.2	0.1	0.1	0.2	0.2
F169	Work	0.3	0.2	0.1	0.0	0.0	0.0	0.0
F170	Mail	0.4	0.4	1.0	0.9	1.1	1.4	1.3
F171	Stationary	0.0	0.0	0.0	0.0	0.0	0.0	0.0
F172	Visitors	0.3	0.3	0.2	0.2	0.1	0.1	0.2
F173	Ombudsman	0.0	0.0	0.0	0.0	0.0	0.0	0.0
F174	Telephone	4.1	2.9	3.1	2.1	1.7	1.6	1.4
F175	Married Couples	0.1	0.1	0.1	0.0	0.0	0.0	0.0
F176	Administer Own Drugs	3.3	3.4	3.1	2.3	2.1	2.4	2.5
F177	Refuse Transfers	0.4	0.3	0.3	0.3	0.3	0.2	0.2

Admission, Transfer, and Discharge Rights

In this category of survey items, the most deficiencies were given for failure to provide notice of facility policies and to provide notice before transfer, although few deficiencies were given in this category (See Table 48). In 1999, none of the 8 items in this category were cited in more than 1 percent of the facilities in the U.S.

Resident Behavior and Facility Practices

In this category of survey items, the highest percent of deficiencies were given for improper use of physical restraints (11.2 percent in 1999). 8.3 percent of facilities received deficiencies for hiring unemployable individuals and 2.6 percent were given citations for improper staff treatment of residents and 2.0 percent for abuse of residents in 1999 (See Table 48).

TABLE 48
PERCENT OF NURSING FACILITIES IN THE U.S. WITH DEFICIENCIES FOR ADMISSION,
TRANSFER & DISCHARGE RIGHTS AND FOR RESIDENT BEHAVIOR & FACILITY PRACTICES

DEFICIENCY GROUP=ADMISSION, TRANSFER AND DISCHARGE RIGHTS

FTAG	DESCRIPTION	1993	1994	1995	1996	1997	1998	1999
F201	Transfer and Discharge	0.3	0.4	0.3	0.4	0.4	0.3	0.3
F202	Documentation	0.4	0.4	0.2	0.2	0.1	0.2	0.1
F203	Notice Before Transfer	3.4	2.3	1.7	0.9	1.0	1.0	0.6
F204	Orientation for Transfer or Discharge	0.7	0.5	0.4	0.3	0.3	0.2	0.2
F205	Notice of Policies	5.4	3.2	2.3	1.3	0.8	0.7	0.8
F206	Permitting Resident to Return to Facility	0.4	0.3	0.2	0.2	0.1	0.1	0.1
F207	Equal Access to Quality Care	0.1	0.1	0.1	0.1	0.1	0.1	0.1
F208	Admission Policy	0.7	0.5	0.4	0.4	0.3	0.3	0.2

DEFICIENCY GROUP=RESIDENT BEHAVIOR AND FACILITY PRACTICES

FTAG	DESCRIPTION	1993	1994	1995	1996	1997	1998	1999
F221	Physical Restraints	17.8	18.6	17.3	14.2	13.5	12.7	11.2
F222	Chemical Restraints	1.8	1.3	0.9	0.8	0.8	0.7	0.5
F223	Abuse	2.0	2.7	2.3	1.5	1.4	1.8	2.0
F224	Staff Treatment of Residents	1.5	2.4	2.4	1.9	1.6	2.1	2.6
F225	Unemployable Individuals	7.6	6.2	5.6	4.5	5.4	6.9	8.3

Quality of Life

Most deficiencies were issued to facilities for failure to maintain the dignity of residents (16.3 percent in 1999) and for poor housekeeping (15.3 percent in 1999). Failure to accommodate the needs of residents and inadequate activities program were also frequently cited (See Table 49). Only 7 of the 19 items in this category were cited in 2 percent or more of the facilities.

TABLE 49
PERCENT OF NURSING FACILITIES IN THE U.S. WITH DEFICIENCIES FOR QUALITY OF LIFE

DEFICIENCY GROUP=QUALITY OF LIFE

FTAG	DESCRIPTION	1993	1994	1995	1996	1997	1998	1999
F240	Quality of Life	1.4	1.5	0.7	0.3	0.2	0.2	0.2
F241	Dignity	19.1	18.5	17.7	13.7	13.2	14.1	16.3
F242	Self-Determination/Participation	2.6	2.6	2.5	2.3	2.2	2.5	2.6
F243	Resident and Family Groups	0.9	0.7	0.9	0.5	0.5	0.5	0.6
F244	Listen to Group	1.4	1.3	0.6	0.3	0.5	0.5	0.3
F245	Participate in Other Activities	0.2	0.1	0.2	0.1	0.1	0.1	0.1
F246	Accomodate Needs	17.1	15.5	14.2	10.1	8.6	9.0	9.4
F247	Notice Before Room Change	0.6	0.6	0.4	0.2	0.2	0.2	0.2
F248	Activities Program	12.0	12.2	12.2	9.5	8.3	8.1	8.6
F249	Activities Director	1.1	1.2	0.9	0.5	0.6	0.5	0.5
F250	Social Services	8.8	9.4	8.6	8.7	7.8	7.5	7.8
F251	Social Work Qualification	0.9	0.6	0.4	0.3	0.2	0.2	0.3
F252	Environment	15.5	14.1	11.5	8.0	6.7	7.2	7.3
F253	Housekeeping	19.5	18.3	16.9	15.1	13.3	14.4	15.3
F254	Clean Linens	3.6	3.4	2.9	2.2	1.7	1.7	1.7
F255	Private Closet	1.0	0.7	0.5	0.1	0.1	0.1	0.1
F256	Adequate Lighting	2.2	1.6	1.1	0.7	0.5	0.5	0.5
F257	Comfortable Temperatures	1.7	1.6	1.1	0.9	0.9	1.1	0.9
F258	Comfortable Sound	2.4	2.6	2.3	2.3	1.8	1.7	1.7

Resident Assessment

Most deficiencies were issued to facilities for failure to provide comprehensive care plans for residents (16.1 percent in 1999) and for poor comprehensive assessments to residents (13.4 percent in 1999) (See Table 50). These were areas emphasized with the adoption of the new federal regulations and new requirements for resident assessments. Eight of 15 items in this category were cited in 2 percent or more of facilities.

TABLE 50
PERCENT OF NURSING FACILITIES IN THE U.S. WITH DEFICIENCIES FOR RESIDENT
ASSESSMENT

DEFICIENCY GROUP=RESIDENT ASSESSMENT

FTAG	DESCRIPTION	1993	1994	1995	1996	1997	1998	1999
F271	Admission Orders	0.3	0.2	0.2	0.2	0.2	0.2	0.2
F272	Comprehensive Assessments	37.3	33.7	29.0	21.5	17.3	15.1	13.4
F273	Frequency	2.3	2.3	1.7	1.4	1.1	1.1	0.7
F274	Change in Condition	7.6	10.1	8.3	5.9	4.6	4.2	3.6
F275	Annual Assessment	1.5	1.0	0.8	0.8	0.7	0.6	0.6
F276	Review of Assessments	6.1	5.5	4.9	4.9	5.0	4.7	4.4
F277	Coordination	0.1	0.1	0.1	0.0	0.0	0.0	0.0
F278	Accuracy of Assessments	15.5	9.9	6.0	4.9	4.4	4.3	5.2
F279	Comprehensive Care Plans	30.5	29.1	24.6	19.9	17.1	15.2	16.1
F280	Plan Requirements	9.8	8.0	6.4	5.5	5.4	4.7	6.0
F281	Professional Standards	6.7	6.5	6.9	8.1	8.2	10.2	12.8
F282	Qualified Personnel	2.3	3.3	4.1	5.2	4.9	5.6	7.3
F283	Discharge Summary	7.5	4.6	2.4	1.2	1.1	1.1	1.1
F284	Post Discharge Plan	3.6	2.6	1.7	0.9	0.9	0.8	0.7
F285	Preadmission Screening	0.5	0.5	0.3	0.3	0.2	0.3	0.2

Quality of Care

The quality of care category contained a number of important items that were given citations. General quality of care was a deficiency in 21.0 percent of facilities (Table 51). This sub-category increased by 86 percent since 1993. The failure to keep the environment as free of hazards as possible was cited in 18.7 percent of facilities in 1999. The failure to prevent pressure sores was a deficiency in 18.0 percent of the facilities in 1999. Accident prevention and ADL services were also sub-categories with frequent deficiencies. 18 out of the 25 items in this category were cited in 2 percent or more of the facilities in the U.S.

TABLE 51
PERCENT OF NURSING FACILITIES IN THE U.S. WITH DEFICIENCIES FOR QUALITY OF CARE

DEFICIENCY GROUP=QUALITY OF CARE

FTAG	DESCRIPTION	1993	1994	1995	1996	1997	1998	1999
F309	Quality of Care	11.3	13.8	12.2	12.8	14.4	17.2	21.0
F310	Activities of Daily Living Maintenance	8.3	5.7	4.1	2.8	2.7	2.5	2.1
F311	Appropriate ADL Treatment	5.6	5.2	5.1	5.0	5.0	5.6	6.4
F312	ADL Services	7.6	7.7	9.0	10.0	10.4	12.0	14.0
F313	Vision and Hearing	0.5	0.4	0.6	0.5	0.5	0.6	0.7
F314	Pressure Sores	18.0	15.0	15.6	15.0	16.1	17.1	18.0
F315	Catheter Prevention	1.1	1.3	1.1	1.2	1.3	1.4	1.3
F316	Incontinence Care	11.8	12.0	12.1	10.4	10.4	10.9	11.5
F317	Range of Motion Maintenance	0.7	0.7	1.0	1.0	0.8	0.7	0.9
F318	Limited Range of Motion Services	8.3	7.1	8.3	8.4	8.7	9.2	9.7
F319	Mental and Psychosocial Services	4.5	5.1	4.6	3.3	2.8	2.4	2.6
F320	Maintenance of Psychosocial Functioning	0.3	0.3	0.3	0.2	0.3	0.1	0.2
F321	Nasogastric Tubes (Tube Feeding)	0.3	0.2	0.2	0.1	0.1	0.2	0.1
F322	Nasogastric Care	5.2	5.2	4.6	4.1	4.1	4.5	5.3
F323	Accident Environment	19.7	19.7	18.3	16.2	16.6	18.0	18.7
F324	Accident Prevention	6.2	7.2	8.0	9.2	11.9	14.7	17.3
F325	Nutrition	9.4	9.4	8.1	8.1	8.3	8.1	9.9
F326	Therapeutic Diet	5.6	5.0	3.7	2.2	2.3	2.0	2.2
F327	Hydration	3.6	3.5	3.2	3.1	2.5	3.2	5.3
F328	Special Needs	5.2	4.1	3.7	3.6	3.3	3.6	4.4
F329	Unnecessary Drugs	16.1	12.7	10.8	11.0	10.6	10.7	11.6
F330	Antipsychotic Drugs	2.4	2.1	1.5	1.3	1.1	1.2	0.8
F331	Drug Reduction	2.6	2.3	1.7	1.2	1.2	1.2	1.0
F332	Medication Errors	8.3	7.4	6.4	5.2	4.9	5.7	7.4
F333	Significant Medication Errors	4.8	4.0	3.3	2.4	2.5	3.1	3.6

Nursing Services

Nursing services are key to quality of care in nursing facilities. 6.2 percent of facilities were given deficiencies for insufficient staff to provide appropriate care in 1993 compared to 5.7 percent in 1999. The number of deficiencies for inadequate registered nurse staffing declined from 7.6 percent in 1993 to 0.9 percent in 1999 (a decrease in deficiencies of 88 percent since 1993) (Table 52).

Dietary Services

In 1999, 26.0 percent of facilities were given deficiencies for inadequate food sanitation. 8.4 percent received citations for inadequate food and 4.8 percent for inadequate menus and nutrition (Table 52).

TABLE 52
PERCENT OF NURSING FACILITIES IN THE U.S. WITH DEFICIENCIES FOR NURSING
SERVICES & DIETARY SERVICES

DEFICIENCY GROUP=NURSING SERVICES

FTAG	DESCRIPTION	1993	1994	1995	1996	1997	1998	1999
F353	Sufficient Nursing Staff	6.2	7.0	5.7	4.2	3.8	4.6	5.7
F354	Registered Nurse Staff	7.6	3.8	2.9	1.5	1.1	1.0	0.9

DEFICIENCY GROUP=DIETARY SERVICES

FTAG	DESCRIPTION	1993	1994	1995	1996	1997	1998	1999
F360	Well-Balanced Diet	0.6	0.6	0.3	0.2	0.2	0.2	0.2
F361	Qualified Staff	1.5	1.1	0.7	0.4	0.4	0.4	0.5
F362	Sufficient Staff	1.6	1.3	1.0	0.7	0.6	0.6	0.8
F363	Menus and Nutritional Adequacy	15.0	10.1	7.1	4.3	4.3	3.8	4.8
F364	Food	14.0	11.5	9.9	8.2	7.3	7.7	8.4
F365	Individual Needs	2.2	2.0	1.8	1.6	2.0	2.4	2.4
F366	Food Substitutes	4.7	3.9	2.5	1.4	1.1	0.9	1.3
F367	Therapeutic Diets	1.8	1.3	1.5	1.5	1.1	1.3	1.8
F368	Frequency of Meals	5.7	6.4	5.0	3.8	3.5	4.2	4.7
F369	Assistive Devices	0.9	0.7	0.6	0.4	0.4	0.5	0.8
F370	Sanitary Conditions	0.2	0.1	0.6	0.0	0.0	0.0	0.0
F371	Food Sanitation	30.4	28.0	24.8	22.4	21.8	23.7	26.0
F372	Garbage Disposal	3.5	3.9	2.6	2.2	2.0	2.5	3.0

Physician Services

Few nursing facilities were given deficiencies for physician services. In 1999, 1.5 percent received deficiencies for inadequate physician visits (Table 53). This was a decrease in deficiencies of 64 percent since 1993.

Rehabilitative Services

In 1999, 0.8 percent of facilities were given deficiencies for inadequate rehabilitative services (Table 53).

Dental Services

Even fewer facilities (less than one percent) were given deficiencies for poor dental services than for other types of professional services in the 1993 to 1999 period (Table 53).

TABLE 53
PERCENT OF NURSING FACILITIES IN THE U.S. WITH DEFICIENCIES FOR PHYSICIAN,
REHABILITATIVE & DENTAL SERVICES

DEFICIENCY GROUP=PHYSICIAN SERVICES

FTAG	DESCRIPTION	1993	1994	1995	1996	1997	1998	1999
F385	Physician Supervision	1.0	0.6	0.5	0.5	0.3	0.3	0.4
F386	Physician Visits	4.2	3.3	2.0	1.8	1.3	1.4	1.5
F387	Frequency	2.1	2.1	1.6	1.5	1.5	1.8	1.9
F388	Physician Alternates	0.2	0.1	0.1	0.1	0.1	0.2	0.2
F389	Availability	0.1	0.1	0.1	0.1	0.0	0.1	0.1
F390	Physician Delegation of Tasks	0.2	0.1	0.1	0.1	0.1	0.0	0.1

DEFICIENCY GROUP=REHABILITATIVE SERVICES

FTAG	DESCRIPTION	1993	1994	1995	1996	1997	1998	1999
F406	Services	1.6	1.7	1.5	1.0	0.9	1.1	0.8
F407	Qualifications	0.4	0.2	0.3	0.1	0.1	0.1	0.1

DEFICIENCY GROUP=DENTAL SERVICES

FTAG	DESCRIPTION	1993	1994	1995	1996	1997	1998	1999
F411	Routine and Emergency Services (SNF)	0.4	0.4	0.4	0.3	0.4	0.5	0.5
F412	Routine and Emergency Services (NF)	0.0	0.3	0.2	0.1	0.2	0.2	0.4

Pharmacy Services

In 1999, 5.6 percent of facilities received deficiencies for failure to comply with proper pharmacy procedures and 5.2 percent for improper storage of drugs (Table 54). Four of the 8 pharmacy categories were cited in more than 2 percent of facilities in 1999.

Infection Control

Infection control is an important category. In 1993, 17.7 percent of facilities received deficiencies for inadequate infection control, compared to 10.5 percent in 1999 (Table 54). This represents a decrease in deficiencies of 41 percent since 1993.

TABLE 54
PERCENT OF NURSING FACILITIES IN THE U.S. WITH DEFICIENCIES FOR PHARMACY
SERVICE & INFECTION CONTROL

DEFICIENCY GROUP=PHARMACY SERVICES

FTAG	DESCRIPTION	1993	1994	1995	1996	1997	1998	1999
F425	Pharmacy	0.2	0.2	0.2	0.2	0.3	0.4	0.5
F426	Procedures	3.7	4.0	3.6	3.0	3.8	4.5	5.6
F427	Service Consultation	1.5	1.2	0.9	0.7	0.7	0.8	0.7
F428	Drug Regimen	2.4	1.9	1.1	0.9	0.7	0.8	1.0
F429	Report Irregularities	5.7	4.7	3.1	2.1	2.1	1.9	3.0
F430	Facility Action	0.0	4.7	2.7	1.3	1.2	1.5	2.0
F431	Labeling	2.3	2.3	1.9	1.6	1.6	1.8	2.2
F432	Storage	4.3	4.1	3.6	3.3	3.1	3.9	5.2

DEFICIENCY GROUP=INFECTION CONTROL

FTAG	DESCRIPTION	1993	1994	1995	1996	1997	1998	1999
F441	Infection Control	17.7	15.9	13.7	10.5	9.3	9.6	10.5
F442	Preventing Spread of Infections	0.8	0.5	0.8	0.7	0.7	0.9	1.0
F443	Direct Contact	0.5	0.5	0.3	0.1	0.1	0.2	0.2
F444	Handwashing	5.4	5.2	4.8	4.6	5.1	5.7	6.3
F445	Linens	6.0	4.6	3.8	2.8	2.6	2.8	3.0

Physical Environment

The category for physical environment includes 16 subcategories. In 1999, 9.2 percent of facilities received deficiencies for other environmental conditions, and 3.9 percent for inadequate room space (Table 55).

TABLE 55
PERCENT OF NURSING FACILITIES IN THE U.S. WITH DEFICIENCIES FOR PHYSICAL
ENVIRONMENT

DEFICIENCY GROUP=PHYSICAL ENVIRONMENT

FTAG	DESCRIPTION	1993	1994	1995	1996	1997	1998	1999
F454	General Health and Safety	0.4	0.4	0.5	1.1	2.0	1.9	2.2
F455	Emergency Power	1.8	1.4	0.8	0.6	0.5	0.4	0.4
F456	Space and Equipment	4.1	3.8	2.9	2.4	2.5	2.6	2.8
F457	Resident Rooms	1.3	1.2	1.0	0.5	0.4	0.3	0.3
F458	Room Space	6.1	5.8	5.3	4.3	4.0	3.9	3.9
F459	Exits	0.1	0.1	0.1	0.0	0.0	0.0	0.0
F460	Privacy	4.7	3.6	2.9	1.6	1.1	0.9	0.7
F461	Windows	0.2	0.1	0.1	0.1	0.1	0.1	0.1
F462	Toilets	0.2	0.2	0.1	0.0	0.0	0.0	0.0
F463	Resident Call System	8.2	6.2	4.9	3.5	2.7	3.0	3.2
F464	Dining and Activities	6.1	4.1	2.7	1.5	1.1	1.0	1.0
F465	Other Environmental Condition	10.5	10.7	6.1	6.6	7.6	9.1	9.2
F466	Emergency Water	0.9	0.5	0.4	0.5	0.5	0.5	0.6
F467	Ventilation	1.8	1.4	1.1	0.8	0.7	0.6	0.9
F468	Equipment in Corridors	2.4	1.9	1.7	1.4	1.1	1.0	1.3
F469	Pest Control	5.6	5.9	5.0	3.9	3.4	3.4	3.3

Administration Services

In 1999, 2.6 percent of facilities received deficiencies for failure to provide adequate inservice education and 3.0 percent for failure to demonstrate the proficiency of nurses aides (Table 56). Two of the 12 administrative subcategories were cited in more than 2 percent of facilities in 1999.

Laboratory Services

In 1999, none of the 7 laboratory services subcategories were cited in more than 2 percent of facilities.

Other Activities

Two of the 8 other activities subcategories were cited in more than 2 percent of facilities in 1999. These deficiencies were issued for inadequate clinical record keeping (10.2 percent in 1999), and emergency training (2.4 percent in 1999).

TABLE 56
PERCENT OF NURSING FACILITIES IN THE U.S. WITH DEFICIENCIES FOR ADMINISTRATION
AND OTHER SERVICES

DEFICIENCY GROUP=ADMINISTRATION

FTAG	DESCRIPTION	1993	1994	1995	1996	1997	1998	1999
F490	Administered Effectively	1.9	2.2	1.8	1.5	1.6	2.2	2.0
F491	Licensure	0.1	0.1	0.0	0.0	0.0	0.0	0.0
F492	Compliance With Laws	1.3	1.1	0.9	1.0	1.0	1.8	1.9
F493	Governing Body	2.1	2.2	1.6	1.0	0.8	0.9	0.8
F494	Required Training	3.3	2.0	1.5	0.9	0.8	0.9	1.0
F495	Employee Competency Program	1.2	1.0	0.9	0.6	0.7	0.7	0.5
F496	Registry Verifications	3.1	2.5	2.3	1.4	1.9	1.9	1.9
F497	Inservice Education	2.7	2.7	2.9	2.3	2.5	3.0	2.6
F498	Proficiency of Nurse Aides	3.1	3.5	3.1	2.7	2.8	3.3	3.0
F499	Qualified Professionals	0.6	0.4	0.3	0.2	0.2	0.2	0.3
F500	Outside Services	0.7	0.6	0.7	1.1	0.8	1.4	1.4
F501	Medical Director	1.2	1.0	0.9	0.6	0.5	0.7	0.6

DEFICIENCY GROUP=LABORATORY SERVICES

FTAG	DESCRIPTION	1993	1994	1995	1996	1997	1998	1999
F502	High Quality, Timely Services	-	1.1	0.9	1.0	1.3	1.9	2.0
F503	Meets Lab Standards	-	2.6	1.1	0.4	0.3	0.3	0.4
F504	Services Ordered by a Physician	-	0.2	0.2	0.1	0.1	0.2	0.2
F505	Notifys Physicians	-	0.2	0.2	0.3	0.3	0.5	0.7
F507	Clinical Records	-	0.1	0.1	0.1	0.1	0.1	0.1
F508	Radiology and Other Services	-	0.1	0.1	0.1	0.1	0.2	0.2
F513	Records Signed and Dated	-	0.0	0.1	0.0	0.0	0.0	0.1

DEFICIENCY GROUP=OTHER ACTIVITIES

FTAG	DESCRIPTION	1993	1994	1995	1996	1997	1998	1999
F514	Clinical Records	-	13.5	10.7	10.0	9.1	9.4	10.2
F516	Records Safeguarded	-	0.6	0.5	0.4	0.6	0.5	0.6
F517	Plans for Emergency	-	0.7	0.5	0.3	0.4	0.4	0.4
F518	Emergency Training	-	3.3	2.9	2.2	1.8	2.2	2.4
F519	Transfer Agreement	-	0.0	0.1	0.0	0.0	0.0	0.0
F520	Quality Assurance Committee	-	0.7	0.9	0.8	0.7	0.6	1.0
F521	Quality Assurance Activities	-	3.1	2.5	2.1	1.9	2.0	1.9
F522	Disclosure of Ownership	-	0.0	0.1	0.0	0.0	0.0	0.0

SUMMARY

In summary, this report has provided information on nursing facilities in the states. The data are from the federal OSCAR system which provides comprehensive information about facility characteristics, resident characteristics and services provided, staffing, and deficiencies from federal surveys. The information provides data for the first six months of 1995 when the federal survey system was modified and also for the second six months after the new federal enforcement guidelines were implemented. The federal survey system

can be expected to change over time as policies are implemented to encourage improvements in the quality of nursing care.

This is one of the few reports which has been able to provide historical data on nursing facilities. Even though data for the early years of the report does not include some of the facilities, the overall trend lines are fairly stable over time for most of the items. Thus, these data provide an opportunity to examine quality issues and deficiency patterns over time.

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TECHNICAL NOTES

Data Sources

The OSCAR system includes data for all certified nursing homes in the U.S. The data are collected in three separate sets of files: (1) provider information, which include facility characteristics and staffing data; (2) health survey file (with facility-level summary information regarding resident characteristics); and the (3) survey deficiencies. OSCAR is an on-line data system from the Health Care Financing Administration (HCFA). The OSCAR data for this report included the most recent surveys for all facilities for the period of 1993-1999. These data were available on several sets of tapes.

All nursing facilities federally certified for Medicare (skilled nursing care) and Medicaid (nursing facilities) were included (about 15,100 facilities) in these data. Intermediate care facilities for the mentally retarded (ICF-MR) were excluded because they use different federal certification forms and have different standards of care. Facilities located in the trust territories and Puerto Rico were excluded.

Data Cleaning and Duplicate Records

In preparing the data for this report, discussions were held with HCFA officials as necessary to discuss data acquisition, formatting, and cleaning issues. Frequency distributions were developed for all the indicators on the data set and a series of cleaning activities undertaken.

The first step in cleaning was to eliminate any duplicate provider records. Duplicate records were considered generally to be the result of changes in certification for Medicare and Medicaid (Title 18/19) facilities or Medicare only (Title 18) facilities. Since 1990, because of OBRA 1987 legislation, Medicaid only (Title 19) SNF and ICF facilities are certified together as nursing facilities (NFs). With this change, some problems with duplicate SNF and ICF reporting were essentially eliminated.

To correct the duplicate problems, we identified all those facilities showing identical values for the following areas: state, city, facility name, and facility address. Where duplicate records were identified, a decision-making procedure was invoked as follows:

- (1) The most recent record within a calendar year was selected over earlier records; and
- (2) A record reporting a category of either: (01) skilled nursing facility (SNF) -- Medicare participation; (02) nursing facility (NF) -- Medicaid participation; or (03) SNF/ICF -- Medicare/Medicaid participation was selected over facilities reporting as (10) hospital based.

For those remaining facilities with the same name and/or address, data on telephone numbers and survey data were then examined. Where there appeared to be two facilities at one site with different data, neither facility was eliminated. This overall process resulted in dropping 79 facilities in 1991, 62 facilities in 1992, 39 facilities in 1993, 30 facilities in 1994, 73 facilities in 1995, 91 facilities in 1996, and 127 facilities in 1999.

Data Errors

The data were examined for missing values and gross errors. Means and standard deviations of the data were computed and examined. Logic checks confirming the reasonableness of data were conducted. Preliminary work identified some missing data and errors, primarily in reporting the beds, staffing and the number of residents. Each problem area, and the cleaning procedures, are discussed below.

Total Number of Beds

During the preliminary work, the total number of beds in each state reported on OSCAR was compared to the total licensed bed supply for each state from an independent survey of states (DuNah et al. 1994). The total number of beds reported by facilities was significantly higher than the total licensed beds in the U.S. An analysis of this discrepancy found that some hospital-based facilities had reported the total number of acute care beds rather than the total number of skilled nursing beds for their facility. To correct this error, the maximum number of beds for a hospital-based facility was set to equal the maximum number of certified skilled nursing beds in the facility. Thus, this process made the total certified nursing facility beds more comparable to the total state licensed nursing facility beds in each state.

Total Number of Residents

Several problems concerning resident data were detected. First, some facilities had missing data for their total number of residents. These facilities were left in the data set, but where resident data were not available, these facilities were not included in the tables report.

Second, some facilities reported extremely low numbers of residents. In order to identify facilities with possible errors in reporting residents, occupancy rates were computed for all nursing facilities. Free-standing (non-hospital based) facilities reporting 50 or less residents than total beds were considered to have erroneous data and were eliminated from the staffing and resident characteristics' analysis.

Third, some facilities reported more residents than beds, suggesting more than 100 percent occupancy. Hospital-based facilities may have had approval for swing beds which would allow the hospital to use an acute care bed for a nursing home resident. Therefore, hospital-based facilities with more residents than beds were left in the data set, but the maximum occupancy rate for such facilities was reported to be 100 percent. Finally, facilities with numbers of residents reported at greater than 100 percent of total beds, which were not hospital-based, were dropped from the analysis.

Staffing Data

Frequencies for hours of staffing per resident day were examined separately for Medicaid only facilities and for Medicare only and/or dually certified facilities. The total number of hours of staff reported in a two week period was divided by the total number of residents and by the 14 days in the reporting period.

There were a number of problems identified with the facility staffing data. Some facilities reported extremely high staff hours per resident day while others reported no registered nurses or no nursing staff hours. Where a facility reported nurse staffing hours

per resident day which did not fall within a reasonable range, the data for that item were be considered invalid. The following uniform decision-making rules were created for eliminating facility staffing data which clearly appeared to be too high or too low:

First, facilities with average nursing hours per resident day that were greater than 24 hours of nursing per resident were considered erroneous and eliminated from the analysis. Distributions of the nursing hours per resident were then examined.

To correct further for staffing levels that were unreasonably high, facilities reporting staffing hours per resident day in the upper 2 percent by type of facility (separately for Medicaid only and for Medicare only/dually certified) and by type of staff (RN, LVN/LPN, and nursing assistants) were eliminated from the staffing analysis.

Facilities reporting extremely low staffing hours per resident day were identified. Since some Title 19 facilities and Title 18/19 facilities were given HCFA waivers from the staffing requirements, these facilities may have few or no RN staff. During our preliminary analysis, OSCAR data showed that there were a total of 56 facilities in 20 states in the US which did not report RN hours in 1991, 112 in 1992, and 96 in 1993. Texas, Oklahoma, and Louisiana had the highest number without RNs. Although this was unusual, these facilities were not removed from the analysis unless they also met the criteria described below.

Since all facilities are required to have some licensed nurses, nursing facilities with no licensed staff (RNs and/or LVN/LPNs) and/or no nursing staff were eliminated from these analyses. In addition, facilities with computed staffing levels in the lower 1 percent range for licensed or combined nursing personnel for each type of facility (separately for Medicaid only and for Medicare only and/or dually certified) were removed from the staffing report because some of these may have been erroneous.

Other reporting errors in staffing data may occur. For example, facility errors in the reporting of time periods may have occurred or rounding errors may have occurred. These types of errors cannot be detected in the data set. Thus, because further accuracy checks could not be conducted, only the high and low outlier facilities were removed from the tables on staff.

RNs, LPN/LVNs, and Aides are presented separately. Total licensed nurses are also presented; these include RNs and LPN/LVNs added together. Total combined nursing personnel are included as combined RNs, LPN/LVNs, and nursing aide hours.